Adverse events should be reported. Reporting forms and information can be found at https://yellowcard.mhra.gov.uk/

Adverse events should also be reported to McNeil Products Limited on 00800 555 22000

Product Name (click hyperlink to go to product)	**PL Number**	**Legal Category**	**RRP (ex-VAT)**
CALPOL Infant Sugar Free Colour Free 120 mg/5 ml Oral Suspension	PL 15513/0300	GSL	100ml bottle £4.38
CALPOL Infant Original 120mg/5ml Oral Suspension	PL 15513/0122	GSL	100ml bottle £4.38
CALPOL Infant Original 120mg/5ml Oral Suspension	PL 15513/0004	P	200ml bottle £6.83
Calpol Sugar Free Infant Suspension	PL 15513/0123	GSL	100ml bottle £4.38
CALPOL Sugar Free Infant suspension	PL 15513/0006	P	200ml bottle £6.83
CALPOL Sugar Free Infant Suspension Sachets	PL 15513/0155	GSL	12 x 5ml sachets £4.41
			20 x 5ml sachets £7.00
Calpol Six Plus Sugar Free Suspension	PL 15513/0003	GSL	100ml bottle £5.21
			200ml bottle £8.08
			12 x 5ml sachets £5.29
Calpol Six Plus Suspension Sugar Free	PL 15513/0164	GSL	80ml £4.68
Calpol Six Plus Fastmelts (250 mg Orodispersible Tablets)	PL 15513/0121	GSL	12's £4.92

Calpol Six Plus Fastmelts (250 mg Orodispersible Tablets)	PL 15513/0082	P	24's £7.74
Calprofen 100mg/5ml Oral Suspension Ibuprofen	PL 15513/0147	GSL	100ml £3.83
Calprofen Ibuprofen Suspension	PL 15513/0120	P	200ml £6.33
Calcough Infant Syrup	PL 15513/0168	GSL	125ml £4.41
CalCough Children's Syrup	PL 15513/0392	GSL	125ml £4.41
CALGEL TEETHING GEL	PL 15513/0015	P	10g £3.41

SUMMARY OF PRODUCT CHARACTERISTICS

1 NAME OF THE MEDICINAL PRODUCT

CALPOL Infant Sugar Free Colour Free 120 mg/5 ml Oral Suspension

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

CALPOL Infant Sugar Free Colour Free 120 mg/5 ml Oral Suspension contains 120 mg Paracetamol in each 5 ml.

Excipients: maltitol liquid ((E965) contains 2.72 g maltitol liquid in each 5ml), sorbitol liquid ((E420) contains 0.97 g of sorbitol liquid per 5ml), sodium (contains 0.86mg per 5ml), benzyl alcohol, propylene glycol (E1520), methyl parahydroxybenzoate (E218), ethyl parahydroxybenzoate (E214) and propyl parahydroxybenzoate (E216). See section 4.4 for further information.

For the full list of excipients, see section 6.1.

3 PHARMACEUTICAL FORM

Oral Suspension.

An off-white strawberry flavoured suspension.

4 CLINICAL PARTICULARS

4.1 Therapeutic indications

CALPOL Infant Sugar Free Colour Free 120 mg/5 ml Oral Suspension is indicated for the treatment of mild to moderate pain and as an antipyretic. It can be used in many conditions including headache, toothache, earache, teething, sore throat, colds and influenza, aches and pains and post-immunisation fever.

4.2 Posology and method of administration

For the relief of fever after vaccinations at 2, 3 and 4 months
2.5ml. This dose may be given up to 4 times a day starting at the time of vaccination. Do not give more than 4 doses in any 24 hour period. Leave at

least 4 hours between doses. If your baby still needs this medicine two days after receiving the vaccine talk to your doctor or pharmacist.

Age : 2 – 3 months	**Dose**
Pain and other causes of fever - if your baby weighs over 4 kg and was born after 37 weeks	2.5 ml If necessary, after 4-6 hours, give a second 2.5 ml dose
• Do not give to babies less than 2 months of age. • Leave at least 4 hours between doses. • Do not give more than 2 doses. This is to ensure that fever that may be due to a serious infection is quickly diagnosed. If your child is still feverish after two doses, talk to your doctor or pharmacist.	

Children aged 3 months – 6 years:

Child's Age	**How Much**	**How often (in 24 hours)**
3 – 6 months	2.5 ml	4 times
6 – 24 months	5 ml	4 times
2 – 4 years	7.5 ml (5 ml + 2.5 ml)	4 times
4 – 6 years	10 ml (5 ml + 5 ml)	4 times
• Do not give more than 4 doses in any 24 hour period • Leave at least 4 hours between doses • Do not give this medicine to your child for more than 3 days without speaking to your doctor or pharmacist		

It is important to **shake the bottle** for at least 10 seconds before use.

The Elderly:

In the elderly, the rate and extent of paracetamol absorption is normal but plasma half-life is longer and paracetamol clearance is lower than in young adults.

4.3 Contraindications

Hypersensitivity to paracetamol or to any of the excipients listed in section 6.1.

4.4 Special warnings and precautions for use

Do not exceed the recommended dose. Taking more than the recommended dose (overdose) may cause liver damage. In case of overdose, get medical help straight away. Quick medical attention is critical for adults as well as children even if signs or symptoms are not noticed.

Taking this product with other paracetamol-containing medicines could lead to overdose and should therefore be avoided.

Care is advised in the administration of paracetamol to patients with severe renal or severe hepatic impairment. The hazards of overdose are greater in those with non-cirrhotic alcoholic liver disease. Chronic alcohol users should consult a doctor before use.

Cases of high anion gap metabolic acidosis (HAGMA) due to pyroglutamic acidosis have been reported in patients with severe illness such as severe renal impairment and sepsis, or in patients with malnutrition or other sources of glutathione deficiency (e.g. chronic alcoholism), who were treated with paracetamol at therapeutic dose for a prolonged period or a combination of paracetamol and flucloxacillin. If HAGMA due to pyroglutamic acidosis is suspected, prompt discontinuation of paracetamol and close monitoring, is recommended. The measurement of urinary 5-oxoproline may be useful to identify pyroglutamic acidosis as underlying cause of HAGMA in patients with multiple risk factors.

Sorbitol and maltitol may cause gastrointestinal discomfort and have a mild laxative effect. Each 5 ml spoonful of this product contains 0.97g sorbitol liquid and 2.72g of maltitol liquid. Calorific values: 2.6 kcal/g sorbitol and 2.3 kcal/g maltitol.

Due to the presence of maltitol liquid (E965) and sorbitol liquid (E420), patients with rare hereditary problems of fructose intolerance should not take this medicine.

Ethyl (E214), Propyl (E216) and Methyl (E218) parahydroxybenzoate may cause allergic reactions (possibly delayed).

This medicine contains less than 1 mmol sodium (23 mg) per 5ml, that is to say essentially ‘sodium-free’.

This medicine contains 14.32mg propylene glycol (E1520) in each 5ml dose,

which is equivalent to 2.86mg/ml. Caution in babies less than 4 weeks old. Co-administration with any substrate for alcohol dehydrogenase such as ethanol may induce serious adverse effects in neonates.

This medicine contains 0.16mg benzyl alcohol in each 5ml which is equivalent to 0.03mg/ml. Benzyl alcohol may cause allergic reactions. Benzyl alcohol has been linked with the risk of severe side effects including breathing problems ("gasping syndrome") in young children. Caution in newborn babies (up to 4 weeks old). Caution in children under 3 years old; do not use for more than 1 week due to increased risk due to accumulation.

Ask your doctor or pharmacist for advice if you are pregnant or breastfeeding, or if you have a liver or kidney disease. This is because large amounts of benzyl alcohol can build-up in your body and may cause side effects (called "metabolic acidosis")

Patients should be informed about the signs of serious skin reactions and use of the drug should be discontinued at the first appearance of skin rash or any other sign of hypersensitivity.

The label contains the following statements:
Contains paracetamol.
Do not give anything else containing paracetamol while giving this medicine.
Do not give more medicine than the label tells you to. If your child does not get better, talk to your doctor.
For oral use only.
Always use the syringe supplied with the pack.
Do not give to babies less than 2 months of age.
For infants 2-3 months no more than 2 doses should be given.
Do not give more than 4 doses in any 24 hour period.
Leave at least 4 hours between doses.
Do not give this medicine to your child for more than 3 days without speaking to your doctor or pharmacist.
As with all medicines, if your child is currently taking any other medicine consult your doctor or pharmacist before using this product.
Keep out of the sight and reach of children.
Do not store above 25□C. Keep bottle in the outer carton.
It is important to shake the bottle for at least 10 seconds before use.
Talk to a doctor at once if your child takes too much of this medicine, even if they seem well.

The leaflet contains the following statements:
Talk to a doctor at once if your child takes too much of this medicine, even if they seem well. This is because too much paracetamol can cause delayed, serious liver damage.

Very rare cases of serious skin reactions have been reported. Symptoms may include:

- Skin reddening

- Blisters
- Rash

If skin reactions occur or existing skin symptoms worsen, stop use and seek medical help right away.

4.5 Interaction with other medicinal products and other forms of interaction

Drugs which induce hepatic microsomal enzymes

Metabolism of paracetamol possibly accelerated by carbamazepine, fosphenytoin, phenytoin, phenobarbital, primidone (also isolated reports of hepatotoxicity).

The speed of absorption of paracetamol may be increased by metoclopramide or domperidone and absorption reduced by cholestyramine.

The anticoagulant effect of warfarin and other coumarins may be enhanced by prolonged regular use of paracetamol with increased risk of bleeding; occasional doses have no significant effect.

Caution should be taken when paracetamol is used concomitantly with flucloxacillin as concurrent intake has been associated with high anion gap metabolic acidosis due to pyroglutamic acidosis, especially in patients with risks factors (see section 4.4).

Chronic alcohol intake can increase the hepatotoxicity of paracetamol overdose and may have contributed to the acute pancreatitis reported in one patient who had taken an overdose of paracetamol. Acute alcohol intake may diminish an individual's ability to metabolise large doses of paracetamol, the plasma half-life of which can be prolonged.

4.6 Fertility, pregnancy and lactation

Pregnancy

A large amount of data on pregnant women indicate neither malformative, nor feto/neonatal toxicity. Epidemiological studies on neurodevelopment in children exposed to paracetamol in utero show inconclusive results. If clinically needed, paracetamol can be used during pregnancy however it should be used at the lowest effective dose for the shortest possible time and at the lowest possible frequency.

When given to the mother in therapeutic doses (1 g single dose), paracetamol crosses the placenta into foetal circulation as early as 30 minutes after ingestion and is metabolised in the foetus by conjugation with sulfate and increasingly with glutathione.

Breast-feeding

Paracetamol is excreted in breast milk but not in a clinically significant amount. Available published data do not contraindicate breast feeding.

Fertility
There is no information relating to the effects of this medicine on fertility.

4.7 Effects on ability to drive and use machines

None known

4.8 Undesirable effects

Adverse drug reactions (ADRs) identified during clinical trials and post marketing experience with paracetamol are listed below by System Organ Class (SOC).

The frequencies are defined according to the following convention:

Very common	≥1/10
Common	≥1/100 to <1/10
Uncommon	≥1/1,000 to <1/100)
Rare	≥1/10,000 to <1/1,000
Very rare	<1/10,000
Not known	(cannot be estimated from the available data).

ADRs are presented by frequency category based on 1) incidence in adequately designed clinical trials or epidemiology studies, if available or 2) when incidence is unavailable, frequency category is listed as Not known.

System Organ Class (SOC)	Frequency	Adverse Drug Reaction (Preferred Term)
Blood and lymphatic system disorders	Not known	Blood disorder (including thrombocytopenia and agranulocytosis) [1]
Immune System Disorders	Very rare Very rare	Anaphylactic reaction Hypersensitivity
Hepatobiliary disorders	Not known	Liver injury[2]
Skin and Subcutaneous Tissue disorders	Very rare Not known Not known Not known	Rash Fixed eruption Rash pruritic Urticaria
Renal and urinary disorders	Uncommon Not known	Nephropathy toxic Renal papillary necrosis[3]
Investigations	Not known	Transaminases increased[4]
Metabolism and nutrition disorders	Not known	High anion gap metabolic acidosis

[1] Reported following paracetamol use, but not necessarily causally related to the drug
[2] Chronic hepatic necrosis has been reported in a patient who took daily therapeutic doses of paracetamol for about a year
[3] Reported after prolonged administration
[4] Low level transaminase elevations may occur in some patients taking therapeutic doses of paracetamol; these elevations are not accompanied with liver failure and usually resolve with continued therapy or discontinuation of paracetamol.

Very rare cases of serious skin reactions have been reported.

Chronic hepatic necrosis has been reported in a patient who took daily therapeutic doses of paracetamol for about a year and liver damage has been reported after daily ingestion of excessive amounts for shorter periods. A review of a group of patients with chronic active hepatitis failed to reveal differences in the abnormalities of liver function in those who were long-term users of paracetamol nor was the control of their disease improved after paracetamol withdrawal.

High anion gap metabolic acidosis.
Cases of high anion gap metabolic acidosis due to pyroglutamic acidosis have been observed in patients with risk factors using paracetamol (see section 4.4). Pyroglutamic acidosis may occur as a consequence of low glutathione levels in these patients.

Reporting of suspected adverse reactions
Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the Yellow Card Scheme at: www.mhra.gov.uk/yellowcard or search for MHRA Yellow Card in the Google Play or Apple App Store.

4.9 Overdose

Liver damage is possible in adults and adolescents (≥12 years of age) who have taken 7.5gor more of paracetamol. It is considered that excess quantities of a toxic metabolite (usually adequately detoxified by glutathione when normal doses of paracetamol are ingested) become irreversibly bound to liver tissue. Ingestion of 5g or more of paracetamol may lead to liver damage if the patient has risk factors (see below)

Risk Factors:
If the patient

a) Is on long term treatment with carbamazepine, phenobarbitone, phenytoin, primidone, rifampicin, St John's Wort or other drugs that induce liver enzymes

OR

b) Regularly consumes ethanol in excess of recommended amounts OR
c) Is likely to be glutathione deplete e.g, eating disorders, cystic fibrosis, HIV infection, starvation, cachexia

Symptoms
Symptoms of paracetamol overdosage in the first 24 hours are pallor, nausea, hyperhidrosis, malaise, vomiting, anorexia, and abdominal pain. Liver damage may become apparent 12 to 48 hours after ingestion. This may include hepatomegaly, liver tenderness, jaundice, acute hepatic failure and hepatic necrosis.

Abnormalities of glucose metabolism and metabolic acidosis may occur. Blood bilirubin, hepatic enzymes, INR, prothrombin time, blood phosphate and blood lactate may be increased.

In severe poisoning, hepatic failure may progress to encephalopathy, haemorrhage, hypoglycaemia, cerebral oedema and death. Acute renal failure with acute tubular necrosis, strongly suggested by loin pain, haematuria and proteinuria, may develop even in the absence of severe liver damage. Cardiac arrhythmias and pancreatitis have been reported.

Haemolytic anaemia (in patients with glucose-6-phosphate dehydrogenase [G6PD] deficiency): Haemolysis has been reported in patients with G6PD deficiency, with use of paracetamol in overdose.

Management
Immediate treatment is essential in the management of paracetamol overdose. Despite a lack of significant early symptoms, patients should be referred to hospital urgently for immediate medical attention. Symptoms may be limited to nausea or vomiting and may not reflect the severity of the overdose or the risk of organ damage. Management should be in accordance with established treatment guidelines, see BNF overdose section.

Treatment with activated charcoal should be considered if the overdose has been taken within 1 hour. Plasma paracetamol concentrations should be measured at 4 hours or later after ingestion (earlier concentrations are unreliable). Treatment with N-acetylcysteine may be used up to 24 hours after ingestion of paracetamol, however the maximum protective effect is obtained up to 8 hours post-ingestion. The effectiveness of the antidote declines sharply after this time. If required the patient should be given intravenous N-acetylcysteine, in line with the established dosage schedule. If vomiting is not a problem oral methionine may be a suitable alternative for remote areas, outside hospital. Management of patient who present with serious hepatic dysfunction beyond 24h from ingestion should be discussed with the NPIS or a liver unit.

5 PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Other Analgesics and Antipyretics (Anilides)
ATC Code: N02 BE01

Paracetamol has analgesic and antipyretic effects similar to those of aspirin and is useful in the treatment of mild to moderate pain. It has only weak anti-inflammatory effects.

5.2 Pharmacokinetic properties

Absorption
Paracetamol is rapidly and almost completely absorbed from the gastrointestinal tract. Peak plasma concentrations are reached 30-90 minutes post dose and the plasma half- life is in the range of 1 to 3 hours after therapeutic doses.

Distribution
Drug is widely distributed throughout most body fluids.

Biotransformation
Metabolism occurs almost entirely via hepatic conjugation with glucuronic acid (about 60%), sulphuric acid (about 35%) or cysteine (about 3%). Small amounts of hydroxylated and deacetylated metabolites have also been detected.

Children have less capacity for glucuronidation of the drug than do adults.

In overdosage there is increased N-hydroxylation followed by glutathione conjugation. When the latter is exhausted, reaction with hepatic proteins is increased leading to necrosis.

Elimination
Following therapeutic doses 90-100% of the drug is recovered in the urine within 24 hours.

5.3 Preclinical safety data

Preclinical data reveal no special hazard for humans based on conventional studies of single and repeated dose toxicity, genotoxicity, and carcinogenicity.

Conventional studies using the currently accepted standards for the evaluation of toxicity to reproduction and development are not available.

6 PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Maltitol liquid (E965)
Sorbitol liquid (non crystallising)
(E420) Glycerol
Microcrystalline cellulose and carmellose sodium
Xanthan gum
Ethyl parahydroxybenzoate (E214)
Methyl parahydroxybenzoate (E218)
Propyl parahydroxybenzoate (E216)
Polysorbate 80
Strawberry Flavour 500286E (containing propylene glycol (E1520) and benzyl alcohol)

Purified water

6.2 Incompatibilities

None known

6.3 Shelf life

3 years

6.4 Special precautions for storage

Do not store above 25°C. Keep bottle in the outer carton.

6.5 Nature and Contents of Container

Amber glass bottle with a two-piece white plastic child-resistant external cap, fitted with an inner plastic cap, including a tamper evident ring fitted with a polyethylene or polyvinylidene chloride (PVDC) polyethylene laminate faced wad.

Or

Amber glass bottle with a two-piece white plastic child-resistant external cap (in polypropylene), fitted with an inner plastic cap, including a tamper evident ring, in high density polyethylene (HDPE). The cap contains a plug made of Low Density Polyethylene (LDPE).

Or

Amber glass bottle with a two-piece white plastic child-resistant external cap (in polypropylene), fitted with an inner plastic cap, including a tamper evident ring, in high density polyethylene (HDPE). A HDPE disk platine and a Press-In-Bottle Adapter (PIBA, commonly named plug), made of Low-Density Polyethylene (LDPE).

Pack sizes
70 ml and 100 ml. A syringe with a 5 ml and 2.5 ml measure is supplied with this pack. Not all pack sizes may be marketed.

6.6 Special precautions for disposal <and other handling>

No special requirements for disposal.

7 MARKETING AUTHORISATION HOLDER

McNeil Products Limited
50 – 100 Holmers Farm Way
High Wycombe
Buckinghamshire
HP12 4EG
UK

8 MARKETING AUTHORISATION NUMBER(S)

PL 15513/0300

9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

15/10/2024

10 DATE OF REVISION OF THE TEXT

20 March 2025

SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

CALPOL Infant Original 120mg/5ml Oral Suspension

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

CALPOL Infant Original 120mg/5ml Oral Suspension contains 120mg Paracetamol in each 5ml.

Excipients: sucrose (contains 2.2 g of sucrose per 5 ml), sorbitol liquid ((E420) contains 0.45 g sorbitol liquid per 5ml), sodium (contains 0.86mg per 5ml), propylene glycol (E1520), methyl parahydroxybenzoate (E218), ethyl parahydroxybenzoate (E214), propyl parahydroxybenzoate (E216) and carmoisine (E122). See section 4.4 for further information.

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Oral Suspension

A pink strawberry flavoured suspension.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

CALPOL Infant Original 120mg/5ml Oral Suspension is indicated for the treatment of mild to moderate pain and as an antipyretic. It can be used in many conditions including headache, toothache, earache, teething, sore throat, colds & influenza, aches and pains and post-immunisation fever.

4.2 Posology and method of administration

For the relief of fever after vaccinations at 2, 3 and 4 months

2.5ml. This dose may be given up to 4 times a day starting at the time of vaccination. Do not give more than 4 doses in any 24 hour period. Leave at least 4 hours between doses. If your baby still needs this medicine two days after receiving the vaccine talk to your doctor or pharmacist.

Age : 2 – 3 months	**Dose**
Pain and other causes of fever - if your baby weighs over 4 kg and was born after 37 weeks • Do not give to babies less than 2 months of age. • Leave at least 4 hours between doses. • Do not give more than 2 doses. This is to ensure that fever that may be due to a serious infection is quickly diagnosed. If your child is still feverish after two doses, talk to your doctor or pharmacist.	2.5 ml If necessary, after 4-6 hours, give a second 2.5 ml dose

Children aged 3 months – 6 years:

Child's Age	How Much	How often (in 24 hours)
3 – 6 months	2.5 ml	4 times
6 – 24 months	5 ml	4 times
2 – 4 years	7.5 ml (5 ml + 2.5 ml)	4 times
4 – 6 years	10 ml (5 ml + 5 ml)	4 times
• Do not give more than 4 doses in any 24 hour period • Leave at least 4 hours between doses • Do not give this medicine to your child for more than 3 days without speaking to your doctor or pharmacist		

It is important to **shake the bottle** for at least 10 seconds before use.

The Elderly:

In the elderly, the rate and extent of paracetamol absorption is normal but plasma half-life is longer and paracetamol clearance is lower than in young adults.

4.3 Contraindications

Hypersensitivity to paracetamol or to any of the excipients listed in section 6.1.

4.4 Special warnings and precautions for use

Do not exceed the recommended dose. Taking more than the recommended dose (overdose) may cause liver damage. In case of overdose, get medical help straight away. Quick medical attention is critical for adults as well as children even if signs or symptoms are not noticed.

Taking this product with other paracetamol-containing medicines could lead to overdose and should therefore be avoided.

Care is advised in the administration of paracetamol to patients with severe renal or severe hepatic impairment. The hazards of overdose are greater in those with non-cirrhotic alcoholic liver disease. Chronic alcohol users should consult a doctor before use.

Cases of high anion gap metabolic acidosis (HAGMA) due to pyroglutamic acidosis have been reported in patients with severe illness such as severe renal impairment and sepsis or in patients with malnutrition and other sources of glutathione deficiency (e.g. chronic alcoholism), who were treated with paracetamol at therapeutic dose for a prolonged period or a combination of paracetamol and flucloxacillin. If HAGMA due to pyroglutamic acidosis is suspected, prompt discontinuation of paracetamol and close monitoring, is recommended. The measurement of urinary 5-oxoproline may be useful to identify pyroglutamic acidosis as underlying cause of HAGMA in patients with multiple risk factors.

Sorbitol may cause gastrointestinal discomfort and have a mild laxative effect. Each 5 ml of this product contains 0.45 g sorbitol liquid. It has a calorific value of 2.6 kcal/g sorbitol.

Due to the presence of sucrose and sorbitol liquid (E420), patients with rare hereditary problems of fructose intolerance, glucose-galactose malabsorption or sucrase-isomaltase insufficiency should not take this medicine.

Ethyl (E214), Propyl (E216) and Methyl (E218) parahydroxybenzoate may cause allergic reactions (possibly delayed).

Carmoisine (E122) may cause allergic reactions.

This medicine contains less than 1 mmol sodium (23 mg) per 5ml, that is to say essentially ‘sodium-free’.

This medicine contains 13.63mg propylene glycol (E1520) in each 5ml dose, which is equivalent to 2.73mg/ml. Caution in babies less than 4 weeks old. Co-administration with any substrate for alcohol dehydrogenase such as ethanol may induce serious adverse effects in neonates.

Patients should be informed about the signs of serious skin reactions and use of the drug should be discontinued at the first appearance of skin rash or any other sign of hypersensitivity.

The label contains the following statements:
Contains paracetamol.
Do not give anything else containing paracetamol while giving this medicine. Do not give more medicine than the label tells you to. If your child does not get better, talk to your doctor.
For oral use only.
Always use the syringe supplied with the pack. Do not give to babies less than 2 months of age.
For infants 2-3 months no more than 2 doses should be given. Do not give more than 4 doses in any 24 hour period.
Leave at least 4 hours between doses.
Do not give this medicine to your child for more than 3 days without speaking to your doctor or pharmacist.
As with all medicines, if your child is currently taking any other medicine consult your doctor or pharmacist before using this product.
Keep out of the sight and reach of children.
Do not store above 25°C. Keep bottle in the outer carton.
It is important to shake the bottle for at least 10 seconds before use.

Talk to a doctor at once if your child takes too much of this medicine, even if they seem well.

The leaflet contains the following statements:
Talk to a doctor at once if your child takes too much of this medicine, even if they seem well. This is because too much paracetamol can cause delayed, serious liver damage.

Very rare cases of serious skin reactions have been reported. Symptoms may include:
- Skin reddening
- Blisters
- Rash

If skin reactions occur or existing skin symptoms worsen, stop use and seek medical help right away.

4.5 Interaction with other medicinal products and other forms of interaction

Drugs which induce hepatic microsomal enzymes

Metabolism of paracetamol possibly accelerated by carbamazepine, fosphenytoin, phenytoin, phenobarbital, primidone (also isolated reports of hepatotoxicity).

The speed of absorption of paracetamol may be increased by metoclopramide or domperidone and absorption reduced by cholestyramine.

The anticoagulant effect of warfarin and other coumarins may be enhanced by prolonged regular use of paracetamol with increased risk of bleeding; occasional doses have no significant effect.

Caution should be taken when paracetamol is used concomitantly with flucloxacillin as concurrent intake has been associated with high anion gap metabolic acidosis due to pyroglutamic acidosis, especially in patients with risks factors (see section 4.4).

Chronic alcohol intake can increase the hepatotoxicity of paracetamol overdose and may have contributed to the acute pancreatitis reported in one patient who had taken an overdose of paracetamol. Acute alcohol intake may diminish an individual's ability to metabolise large doses of paracetamol, the plasma half-life of which can be prolonged.

4.6 Fertility, pregnancy and lactation

Pregnancy
A large amount of data on pregnant women indicate neither malformative, nor feto/neonatal toxicity. Epidemiological studies on neurodevelopment in children exposed to paracetamol in utero show inconclusive results. If clinically needed, paracetamol can be used during pregnancy however it should be used at the lowest effective dose for the shortest possible time and at the lowest possible frequency.
When given to the mother in therapeutic doses (1 g single dose), paracetamol crosses the placenta into foetal circulation as early as 30 minutes after ingestion and is metabolised in the foetus by conjugation with sulfate and increasingly with glutathione.

Breast-feeding
Paracetamol is excreted in breast milk but not in a clinically significant amount. Available published data do not contraindicate breast-feeding.

Fertility
There is no information relating to the effects of this medicine on fertility.

4.7 Effects on ability to drive and use machines

None known.

4.8 Undesirable effects

Adverse drug reactions (ADRs) identified during clinical trials and post-marketing experience with paracetamol are listed below by System Organ Class (SOC).

The frequencies are defined according to the following convention: Very

common	≥1/10
Common	≥1/100 to <1/10
Uncommon	≥1/1,000 to <1/100)
Rare	≥1/10,000 to <1/1,000
Very rare	<1/10,000
Not known	(cannot be estimated from available data).

ADRs are presented by frequency category based on 1) incidence in adequately designed clinical trials or epidemiology studies, if available or 2) when incidence is unavailable, frequency category is listed as Not known.

System Organ Class (SOC)	**Frequency**	**Adverse Drug Reaction (Preferred Term)**
Blood and lymphatic system disorders	Not known	Blood disorder (including Thrombocytopenia and agranulocytosis) [1]
Immune System Disorders	Very rare Very rare	Anaphylactic reaction Hypersensitivity
Hepatobiliary disorders	Not known	Liver injury[2]
Skin and Subcutaneous Tissue disorders	Very rare Not known Not known Not known	Rash Fixed eruption Rash pruritic Urticaria
Renal and urinary disorders	Uncommon Not known	Nephropathy toxic Renal papillary necrosis[3]
Investigations	Not known	Transaminases increased[4]
Metabolism and nutrition disorders	Not known	High anion gap metabolic acidosis

[1] Reported following paracetamol use, but not necessarily causally related to the drug
[2] Chronic hepatic necrosis has been reported in a patient who took daily therapeutic doses of paracetamol for about a year
[3] Reported after prolonged administration
[4] Low level transaminase elevations may occur in some patients taking therapeutic doses of paracetamol; these elevations are not accompanied with liver failure and usually resolve with continued therapy or discontinuation of paracetamol.

Very rare cases of serious skin reactions have been reported.

Chronic hepatic necrosis has been reported in a patient who took daily therapeutic doses of paracetamol for about a year and liver damage has been reported after daily ingestion of excessive amounts for shorter periods. A review of a group of patients with chronic active hepatitis failed to reveal differences in the abnormalities of liver function in those who were long-term users of paracetamol nor was the control of the disease improved after paracetamol withdrawal.

High anion gap metabolic acidosis.

Cases of high anion gap metabolic acidosis due to pyroglutamic acidosis have been observed in patients with risk factors using paracetamol (see section 4.4). Pyroglutamic acidosis may occur as a consequence of low glutathione levels in these patients.

Reporting of suspected adverse reactions
Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the Yellow Card Scheme at: *www.mhra.gov.uk/yellowcard* or search for MHRA Yellow Card in the Google Play or Apple App Store.

4.9 Overdose

Liver damage is possible in adults and adolescents (≥12 years of age) who have taken 7.5g or more of paracetamol. It is considered that excess quantities of a toxic metabolite (usually adequately detoxified by glutathione when normal doses of paracetamol are ingested) become irreversibly bound to liver tissue. Ingestion of 5g or more of paracetamol may lead to liver damage if the patient has risk factors (see below)

Risk Factors:
If the patient

a) Is on long term treatment with carbamazepine, phenobarbitone, phenytoin, primidone, rifampicin, St John's Wort or other drugs that induce liver enzymes

OR

b) Regularly consumes ethanol in excess of recommended amounts

OR

c) Is likely to be glutathione deplete e.g, eating disorders, cystic fibrosis, HIV infection, starvation, cachexia

Symptoms
Symptoms of paracetamol overdosage in the first 24 hours are pallor, nausea, hyperhidrosis, malaise, vomiting, anorexia and abdominal pain. Liver damage may become apparent 12 to 48 hours after ingestion. This may include hepatomegaly, liver tenderness, jaundice, acute hepatic failure and hepatic necrosis. Abnormalities of glucose metabolism and metabolic acidosis may occur. Blood bilirubin, hepatic enzymes, INR, prothrombin time, blood phosphate and blood lactate may be increased. In severe poisoning, hepatic failure may progress to encephalopathy, haemorrhage, hypoglycaemia, cerebral oedema and death. Acute renal failure with acute tubular necrosis, strongly suggested by loin pain, haematuria and proteinuria, may develop even in the absence of severe liver damage. Cardiac arrhythmias and pancreatitis have been reported.

Haemolytic anaemia (in patients with glucose-6-phosphate dehydrogenase [G6PD] deficiency): Haemolysis has been reported in patients with G6PD deficiency, with use of paracetamol in overdose.

Management
Immediate treatment is essential in the management of paracetamol overdose. Despite a lack of significant early symptoms, patients should be referred to hospital urgently for immediate medical attention. Symptoms may be limited to nausea or vomiting and may not reflect the severity of the overdose or the risk of organ damage.

Management should be in accordance with established treatment guidelines, see BNF overdose section.

Treatment with activated charcoal should be considered if the overdose has been taken within 1 hour. Plasma paracetamol concentrations should be measured at 4 hours or later after ingestion (earlier concentrations are unreliable). Treatment with N-acetylcysteine may be used up to 24 hours after ingestion of paracetamol, however the maximum protective effect is obtained up to 8 hours post-ingestion. The effectiveness of the antidote declines sharply after this time. If required the patient should be given intravenous N-acetylcysteine, in line with the established dosage schedule. If vomiting is not a problem oral methionine may be a suitable alternative for remote areas, outside hospital. Management of patient who present with serious hepatic dysfunction beyond 24h from ingestion should be discussed with the NPIS or a liver unit.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Other Analgesics and Antipyretics (Anilides)
ATC Code: N02 BE01

Paracetamol has analgesic and antipyretic effects that do not differ significantly from those of aspirin. However it has only weak anti-inflammatory effects. It is only a weak inhibitor of prostaglandin biosynthesis although there is some evidence to suggest it may be more effective against enzymes in the central nervous system than in the periphery. This may in part account for its activity profile.

5.2 Pharmacokinetic properties

Absorption
Paracetamol is rapidly and almost completely absorbed from the gastrointestinal tract with peak plasma concentrations occurring 0.5-2 hours after dosing. The plasma half-life is approximately 2 hours after therapeutic doses in adults but is increased in neonates to about 5 hours.

Distribution
It is widely distributed through the body.

Biotransformation
Metabolism is principally by the hepatic microsomal enzymes and urinary excretion accounts for over 90% of the dose within 1 day. Virtually no paracetamol is excreted unchanged, the bulk being conjugated with glucoronic acid (60%), sulphuric acid (35%) or cysteine (3%).

Children have less capacity for glucuronidation of the drug than adults.

Elimination
Following therapeutic doses 90-100% of the drug is recovered in the urine within 24 hours.

5.3 Preclinical safety data

Preclinical data reveal no special hazard for humans based on conventional studies of single and repeated dose toxicity, genotoxicity, and carcinogenicity.

Conventional studies using the currently accepted standards for the evaluation of toxicity to reproduction and development are not available.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Sucrose
Sorbitol Liquid (Non Crystallising) (E420)

Glycerol
Xanthan Gum
Microcrystalline cellulose and carmellose sodium
Polysorbate 80
Acesulfame Potassium
Propyl Parahydroxybenzoate (E216)
Ethyl Parahydroxybenzoate (E214)
Strawberry Flavour 500018E (containing propylene glycol (E1520)) Methyl Parahydroxybenzoate (E218)
Carmoisine (E122)
Purified Water

6.2 **Incompatibilities**

None known

6.3 **Shelf life**

3 years

6.4 **Special precautions for storage**

Do not store above 25ºC. Keep bottle in the outer carton.

6.5 **Nature and contents of container**

Amber glass bottle with a two-piece white plastic child-resistant external cap, fitted with an inner plastic cap, including a tamper evident ring fitted with a polyethylene or polyvinylidene chloride (PVDC) laminate faced wad.

Or
Amber glass bottle with a two-piece white plastic child-resistant external cap (in polypropylene), fitted with an inner plastic cap, including a tamper evident ring, in high density polyethylene (HDPE). The cap contains a plug made of Low Density Polyethylene (LDPE).

Or
Amber glass bottle with a two-piece white plastic child-resistant external cap (in polypropylene), fitted with an inner plastic cap, including a tamper evident ring, in high density polyethylene (HDPE). A HDPE disk platine and a Press- In-Bottle Adapter (PIBA, commonly named plug), made of Low-Density Polyethylene (LDPE).

Pack sizes 70 ml and 100 ml. A syringe with a 5 ml and 2.5 ml measure is supplied with this pack. Not all pack sizes may be marketed.

6.6 **Special precautions for disposal**

No special requirements for disposal.

7. MARKETING AUTHORISATION HOLDER

McNeil Products Limited
1 Station Hill Square
Station Hill
Reading
RG1 1LN
UK

8. MARKETING AUTHORISATION NUMBER

PL 15513/0122

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

3rd June 2005/ 25 February 2009

10. DATE OF REVISION OF THE TEXT

28 August 2026

Legal Status: GSL for bottles of 100ml or less

SUMMARY OF PRODUCT CHARACTERISTICS

1 NAME OF THE MEDICINAL PRODUCT

CALPOL Infant Original 120mg/5ml Oral Suspension

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

CALPOL Infant Original 120mg/5ml Oral Suspension contains 120mg Paracetamol in each 5ml.

Excipients: sucrose (contains 2.2 g of sucrose per 5 ml), sorbitol liquid ((E420) contains 0.45 g sorbitol liquid per 5ml), sodium (contains 0.86mg per 5ml), propylene glycol (E1520), methyl parahydroxybenzoate (E218), ethyl parahydroxybenzoate (E214), propyl parahydroxybenzoate (E216) and carmoisine (E122). See section 4.4 for further information.

For the full list of excipients, see section 6.1.

3 PHARMACEUTICAL FORM

Oral Suspension.

A pink strawberry flavoured suspension.

4 CLINICAL PARTICULARS

4.1 Therapeutic indications

CALPOL Infant Original 120mg/5ml Oral Suspension is indicated for the treatment of mild to moderate pain and as an antipyretic. It can be used in many conditions including headache, toothache, earache, teething, sore throat, colds & influenza, aches and pains and post-immunisation fever.

4.2 Posology and method of administration

For the relief of fever after vaccinations at 2, 3 and 4 months
2.5ml. This dose may be given up to 4 times a day starting at the time of vaccination. Do not give more than 4 doses in any 24 hour period. Leave at least 4 hours between doses. If your baby still needs this medicine two days after receiving the vaccine talk to your doctor or pharmacist.

Age : 2 – 3 months	**Dose**
Pain and other causes of fever - if your baby weighs over 4 kg and was born after 37 weeks	2.5 ml If necessary, after 4-6 hours, give a second 2.5 ml dose
• Do not give to babies less than 2 months of age. • Leave at least 4 hours between doses. • Do not give more than 2 doses. This is to ensure that fever that may be due to a serious infection is quickly diagnosed. If your child is still feverish after two doses, talk to your doctor or pharmacist.	

Children aged 3 months – 6 years:

Child's Age	**How Much**	**How often (in 24 hours)**
3 – 6 months	2.5 ml	4 times
6 – 24 months	5 ml	4 times
2 – 4 years	7.5 ml (5ml + 2.5 ml)	4 times
4 – 6 years	10 ml (5ml + 5 ml)	4 times
• Do not give more than 4 doses in any 24 hour period • Leave at least 4 hours between doses • Do not give this medicine to your child for more than 3 days without speaking to your doctor or pharmacist		

It is important to **shake the bottle** for at least 10 seconds before use.

The Elderly:

In the elderly, the rate and extent of paracetamol absorption is normal but plasma half-life is longer and paracetamol clearance is lower than in young adults.

4.3 Contraindications

Hypersensitivity to paracetamol or to any of the excipients listed in section 6.1.

4.4 Special warnings and precautions for use

Do not exceed the recommended dose. Taking more than the recommended dose (overdose) may cause liver damage. In case of overdose, get medical help straight away. Quick medical attention is critical for adults as well as children even if signs and symptoms are not noticed.

Taking this product with other paracetamol-containing medicines could lead to overdose and should therefore be avoided.

Care is advised in the administration of paracetamol to patients with severe renal or severe hepatic impairment. The hazards of overdose are greater in those with non-cirrhotic alcoholic liver
disease. Chronic alcohol users should consult a doctor before use.

Cases of high anion gap metabolic acidosis (HAGMA) due to pyroglutamic acidosis have been reported in patients with severe illness such as severe renal impairment and sepsis, or in patients with malnutrition or other sources of glutathione deficiency (e.g. chronic alcoholism), who were treated with paracetamol at therapeutic dose for a prolonged period or a combination of paracetamol and flucloxacillin. If HAGMA due to pyroglutamic acidosis is suspected, prompt discontinuation of paracetamol and close monitoring, is recommended. The measurement of urinary 5-oxoproline may be useful to identify pyroglutamic acidosis as underlying cause of HAGMA in patients with multiple risk factors.

Sorbitol may cause gastrointestinal discomfort and have a mild laxative effect. Each 5 ml of this product contains 0.45 g sorbitol liquid. It has a calorific value of 2.6 kcal/g sorbitol.

Due to the presence of sucrose and sorbitol liquid (E420), patients with rare hereditary problems of fructose intolerance, glucose-galactose malabsorption or sucrase-isomaltase insufficiency should not take this medicine.

Ethyl (E214), Propyl (E216) and Methyl (E218) parahydroxybenzoate may cause allergic reactions (possibly delayed).

Carmoisine (E122) may cause allergic reactions.

This medicine contains less than 1 mmol sodium (23 mg) per 5ml, that is to say essentially ‘sodium-free’.

This medicine contains 13.63mg propylene glycol (E1520) in each 5ml dose, which is equivalent to 2.73mg/ml. Caution in babies less than 4 weeks old. Co-administration with any substrate for alcohol dehydrogenase such as ethanol may induce serious adverse effects in neonates.

Patients should be informed about the signs of serious skin reactions and use of the drug should be discontinued at the first appearance of skin rash or any other sign of hypersensitivity.

The label contains the following statements:
Contains paracetamol.
Do not give anything else containing paracetamol while giving this medicine.
Do not give more medicine than the label tells you to. If your child does not get better, talk to your doctor.
For oral use only.
Always use the syringe supplied with the pack.
Do not give to babies less than 2 months of age.
For infants 2-3 months no more than 2 doses should be given.
Do not give more than 4 doses in any 24 hour period.
Leave at least 4 hours between doses.
Do not give this medicine to your child for more than 3 days without speaking to your doctor or pharmacist.
As with all medicines, if your child is currently taking any other medicine consult your doctor or pharmacist before using this product.
Keep out of the sight and reach of children.
Do not store above 25°C. Keep bottle in the outer carton.
It is important to shake the bottle for at least 10 seconds before use.

Talk to a doctor at once if your child takes too much of this medicine, even if they seem well.

The leaflet contains the following statements:
Talk to a doctor at once if your child takes too much of this medicine, even if they seem well. This is because too much paracetamol can cause delayed, serious liver damage.

Very rare cases of serious skin reactions have been reported. Symptoms may include:
- Skin reddening
- Blisters
- Rash

If skin reactions occur or existing skin symptoms worsen, stop use and seek medical help right away.

4.5 Interaction with other medicinal products and other forms of interaction

Drugs which induce hepatic microsomal enzymes
Metabolism of paracetamol possibly accelerated by carbamazepine, fosphenytoin, phenytoin, phenobarbital, primidone (also isolated reports of hepatotoxicity).

The speed of absorption of paracetamol may be increased by metoclopramide or domperidone and absorption reduced by cholestyramine.

The anticoagulant effect of warfarin and other coumarins may be enhanced by prolonged regular use of paracetamol with increased risk of bleeding; occasional doses have no significant effect.

Caution should be taken when paracetamol is used concomitantly with flucloxacillin as concurrent intake has been associated with high anion gap metabolic acidosis due to pyroglutamic acidosis, especially in patients with risks factors (see section 4.4).

Chronic alcohol intake can increase the hepatotoxicity of paracetamol overdose and may have contributed to the acute pancreatitis reported in one patient who had taken an overdose of paracetamol. Acute alcohol intake may diminish an individual's ability to metabolise large doses of paracetamol, the plasma half-life of which can be prolonged.

4.6 Fertility, pregnancy and lactation

Pregnancy
A large amount of data on pregnant women indicate neither malformative, nor feto/neonatal toxicity. Epidemiological studies on neurodevelopment in children exposed to paracetamol in utero show inconclusive results. If clinically needed, paracetamol can be used during pregnancy however it should be used at the lowest effective dose for the shortest possible time and at the lowest possible frequency.

When given to the mother in therapeutic doses (1 g single dose), paracetamol crosses the placenta into foetal circulation as early as 30 minutes after ingestion and is metabolised in the foetus by conjugation with sulfate and increasingly with glutathione.

Breast-feeding
Paracetamol is excreted in breast milk but not in a clinically significant amount. Available published data do not contraindicate breast-feeding.

Fertility
There is no information relating to the effects of this medicine on fertility.

4.7 Effects on ability to drive and use machines

None known.

4.8 Undesirable effects

Adverse drug reactions (ADRs) identified during clinical trials and post-marketing experience with paracetamol are listed below by System Organ Class (SOC).

The frequencies are defined according to the following convention:

Very common	≥1/10
Common	≥1/100 to <1/10
Uncommon	≥1/1,000 to <1/100)
Rare	≥1/10,000 to <1/1,000
Very rare	<1/10,000
Not known	(cannot be estimated from available data).

ADRs are presented by frequency category based on 1) incidence in adequately designed clinical trials or epidemiology studies, if available or 2) when incidence is unavailable, frequency category is listed as Not known.

System Organ Class (SOC)	**Frequency**	**Adverse Drug Reaction (Preferred Term)**
Blood and lymphatic system disorders	Not known	Blood disorder (including thrombocytopenia and agranulocytosis) [1]
Immune System Disorders	Very rare Very rare	Anaphylactic reaction Hypersensitivity
Hepatobiliary disorders	Not known	Liver injury[2]
Skin and Subcutaneous Tissue disorders	Very rare Not known Not known Not known	Rash Fixed eruption Rash pruritic Urticaria
Renal and urinary disorders	Uncommon Not known	Nephropathy toxic Renal papillary necrosis[3]
Investigations	Not known	Transaminases increased[4]
Metabolism and nutrition disorders	Not known	High anion gap metabolic acidosis

[1] Reported following paracetamol use, but not necessarily causally related to the drug
[2] Chronic hepatic necrosis has been reported in a patient who took daily therapeutic doses of paracetamol for about a year
[3] Reported after prolonged administration
[4] Low level transaminase elevations may occur in some patients taking therapeutic doses of paracetamol; these elevations are not accompanied with liver failure and usually resolve with continued therapy or discontinuation of paracetamol.

Very rare cases of serious skin reactions have been reported.

Chronic hepatic necrosis has been reported in a patient who took daily therapeutic doses of paracetamol for about a year and liver damage has been reported after daily ingestion of excessive amounts for shorter periods. A review of a group of patients with chronic active hepatitis failed to reveal differences in the abnormalities of liver function in those who were long-term users of paracetamol nor was the control of the disease improved after paracetamol withdrawal.

High anion gap metabolic acidosis.
Cases of high anion gap metabolic acidosis due to pyroglutamic acidosis have been observed in patients with risk factors using paracetamol (see section 4.4). Pyroglutamic acidosis may occur as a consequence of low glutathione levels in these patients.

Reporting of suspected adverse reactions
Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the Yellow Card Scheme at: *www.mhra.gov.uk/yellowcard* or search for MHRA Yellow Card in the Google Play or Apple App Store.

4.9 Overdose

Liver damage is possible in adults and adolescents (≥12 years of age) who have taken 7.5g or more of paracetamol. It is considered that excess quantities of a toxic metabolite (usually adequately detoxified by glutathione when normal doses of paracetamol are ingested) become irreversibly bound to liver tissue. Ingestion of 5g or more of paracetamol may lead to liver damage if the patient has risk factors (see below).

Risk Factors:
If the patient

a) Is on long term treatment with carbamazepine, phenobarbital, phenytoin, primidone, rifampicin, St John's Wort or other drugs that induce liver enzymes.
Or
b) Regularly consumes ethanol in excess of recommended amounts
Or
c) Is likely to be glutathione deplete e.g. eating disorders, cystic fibrosis, HIV infection, starvation, cachexia.

Symptoms
Symptoms of paracetamol overdosage in the first 24 hours are pallor, nausea, hyperhidrosis, malaise, vomiting, anorexia and abdominal pain. Liver damage may become apparent 12 to 48 hours after ingestion. This may include

hepatomegaly, liver tenderness, jaundice, acute hepatic failure and hepatic necrosis,

Abnormalities of glucose metabolism and metabolic acidosis may occur. Blood bilirubin, hepatic enzymes, INR, prothrombin time, blood phosphate and blood lactate may be increased.

In severe poisoning, hepatic failure may progress to encephalopathy, haemorrhage, hypoglycaemia, cerebral oedema and death. Acute renal failure with acute tubular necrosis, strongly suggested by loin pain, haematuria and proteinuria, may develop even in the absence of severe liver damage. Cardiac arrhythmias and pancreatitis have been reported.

Haemolytic anaemia (in patients with glucose-6-phosphate dehydrogenase [G6PD] deficiency): Haemolysis has been reported in patients with G6PD deficiency, with use of paracetamol in overdose.

Management
Immediate treatment is essential in the management of paracetamol overdose. Despite a lack of significant early symptoms, patients should be referred to hospital urgently for immediate medical attention. Symptoms may be limited to nausea or vomiting and may not reflect the severity of overdose or the risk of organ damage. Management should be in accordance with established treatment guidelines, see BNF overdose section.

Treatment with activated charcoal should be considered if the overdose has been taken within 1 hour. Plasma paracetamol concentration should be measured at 4 hours or later after ingestion (earlier concentrations are unreliable). Treatment with N-acetylcysteine may be used up to 24 hours after ingestion of paracetamol, however the maximum protective effect is obtained up to 8 hours post-ingestion. The effectiveness of the antidote declines sharply after this time. If required the patient should be given intravenous N-acetylcysteine, in line with the established dosage schedule. If vomiting is not a problem, oral methionine may be a suitable alternative for remote areas, outside hospital. Management of patients who present with serious hepatic dysfunction beyond 24h from ingestion should be discussed with the NPIS or a liver unit.

5 PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Other Analgesics and Antipyretics (Anilides)
ATC Code: N02 BE01

Paracetamol has analgesic and antipyretic effects that do not differ significantly from those of aspirin. However it has only weak anti-inflammatory effects. It is only a weak inhibitor of prostaglandin biosynthesis although there is some evidence to suggest it may be more effective against enzymes in the central nervous system than in the periphery. This may in part account for its activity profile.

5.2 Pharmacokinetic properties

Absorption
Paracetamol is rapidly and almost completely absorbed from the gastrointestinal tract with peak plasma concentrations occurring 0.5-2 hours after dosing. The plasma half-life is approximately 2 hours after therapeutic doses in adults but is increased in neonates to about 5 hours.

Distribution
It is widely distributed through the body.

Biotransformation
Metabolism is principally by the hepatic microsomal enzymes and urinary excretion accounts for over 90% of the dose within 1 day. Virtually no paracetamol is excreted unchanged, the bulk being conjugated with glucoronic acid (60%), sulphuric acid (35%) or cysteine (3%).

Children have less capacity for glucuronidation of the drug than adults.

Elimination
Following therapeutic doses 90-100% of the drug is recovered in the urine within 24 hours.

5.3 Preclinical safety data

Preclinical data reveal no special hazard for humans based on conventional studies of single and repeated dose toxicity, genotoxicity, and carcinogenicity.

Conventional studies using the currently accepted standards for the evaluation of toxicity to reproduction and development are not available.

6 PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Sucrose
Sorbitol Liquid (Non Crystallising) (E420)

Glycerol
Xanthan Gum
Microcrystalline cellulose and carmellose sodium
Polysorbate 80
Acesulfame Potassium
Propyl Parahydroxybenzoate (E216)
Ethyl Parahydroxybenzoate (E214)
Strawberry Flavour 500018E (containing propylene glycol (E1520))
Methyl parahydroxybenzoate (E218)
Carmoisine (E122)
Purified Water

6.2 Incompatibilities

None known

6.3 Shelf life

3 years

6.4 Special precautions for storage

Do not store above 25ºC. Keep bottle in the outer carton.

6.5 Nature and contents of container

Amber glass bottle with a two-piece white plastic child-resistant external cap, fitted with an inner plastic cap, including a tamper evident ring fitted with a polyethylene or polyvinylidene chloride (PVDC) laminate faced wad.

Or

Amber glass bottle with a two-piece white plastic child-resistant external cap (in polypropylene), fitted with an inner plastic cap, including a tamper evident ring, in high density polyethylene (HDPE). The cap contains a plug made of Low Density Polyethylene (LDPE).

Or
Amber glass bottle with a two-piece white plastic child-resistant external cap (in polypropylene), fitted with an inner plastic cap, including a tamper evident ring, in high density polyethylene (HDPE). A HDPE disk platine and a Press-In-Bottle

Adapter (PIBA, commonly named plug), made of Low-Density Polyethylene (LDPE).

Pack sizes 140 and 200 ml. A syringe with a 5 ml and 2.5 ml measure is supplied with this pack. Not all pack sizes may be marketed.

6.6 Special precautions for disposal

No special requirements for disposal.

7 MARKETING AUTHORISATION HOLDER

McNeil Products Limited
1 Station Hill Square
Station Hill
Reading
RG1 1LN
UK

8 MARKETING AUTHORISATION NUMBER (S)

PL 15513/0004

9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

28/04/1997 / 31/03/2003

10 DATE OF REVISION OF THE TEXT

01 September 2026

SUMMARY OF PRODUCT CHARACTERISTICS

1 NAME OF THE MEDICINAL PRODUCT

Calpol Sugar Free Infant Suspension

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

CALPOL Sugar Free Infant suspension contains 120 mg Paracetamol in each 5 ml.

Excipients: maltitol liquid ((E965), contains 2.72 g of maltitol liquid in each 5ml), sorbitol liquid ((E420) contains 0.97 g of sorbitol liquid per 5ml), sodium (contains 0.86mg per 5ml), benzyl alcohol, propylene glycol (E1520), methyl parahydroxybenzoate (E218), ethyl parahydroxybenzoate (E214), propyl parahydroxybenzoate (E216) and carmoisine (E122). See section 4.4 for further information.

For the full list of excipients, see section 6.1.

3 PHARMACEUTICAL FORM

Oral Suspension.
A pink strawberry flavoured suspension.

4 CLINICAL PARTICULARS

4.1 Therapeutic indications

Calpol Sugar Free Infant Suspension is indicated for the treatment of mild to moderate pain and as an antipyretic. It can be used in many conditions including headache, toothache, earache, teething, sore throat, colds & influenza, aches and pains and post-immunisation fever.

4.2 Posology and method of administration

For the relief of fever after vaccinations at 2, 3 and 4 months

2.5ml. This dose may be given up to 4 times a day starting at the time of vaccination. Do not give more than 4 doses in any 24 hour period. Leave at least 4 hours between doses. If your baby still needs this medicine two days after receiving the vaccine talk to your doctor or pharmacist.

Age : 2 – 3 months	Dose
Pain and other causes of fever - if your baby weighs over 4 kg and was born after 37 weeks	2.5 ml If necessary, after 4-6 hours, give a second 2.5 ml dose
• Do not give to babies less than 2 months of age. • Leave at least 4 hours between doses. • Do not give more than 2 doses. This is to ensure that fever that may be due to a serious infection is quickly diagnosed. If your child is still feverish after two doses, talk to your doctor or pharmacist.	

Children aged 3 months- 6 years:

Child's Age	How Much	How often (in 24 hours)
3 – 6 months	2.5 ml	4 times
6 – 24 months	5 ml	4 times
2 – 4 years	7.5 ml (5 ml + 2.5 ml)	4 times
4 – 6 years	10 ml (5 ml + 5ml)	4 times
• Do not give more than 4 doses in any 24 hour period • Leave at least 4 hours between doses • Do not give this medicine to your child for more than 3 days without speaking to your doctor or pharmacist		

It is important to **shake the bottle** for at least 10 seconds before use.

The Elderly:

In the elderly, the rate and extent of paracetamol absorption is normal but plasma half-life is longer and paracetamol clearance is lower than in young adults.

4.3 Contraindications

Hypersensitivity to paracetamol or to any of the excipients listed in section 6.1.

4.4 Special warnings and precautions for use

Do not exceed the recommended dose. Taking more than the recommended dose (overdose) may cause liver damage. In case of overdose, get medical help straight away. Quick medical attention is critical for adults as well as children even if signs or symptoms are not noticed.

Taking this product with other paracetamol-containing medicines could lead to overdose and should therefore be avoided.

Care is advised in the administration of paracetamol to patients with severe renal or severe hepatic impairment. The hazards of overdose are greater in those with non- cirrhotic alcoholic liver disease. Chronic alcohol users should consult a doctor before use.

Cases of high anion gap metabolic acidosis (HAGMA) due to pyroglutamic acidosis have been reported in patients with severe illness such as severe renal impairment and sepsis, or in patients with malnutrition or other sources of glutathione deficiency (e.g. chronic alcoholism), who were treated with paracetamol at therapeutic dose for a prolonged period or a combination of paracetamol and flucloxacillin. If HAGMA due to pyroglutamic acidosis is suspected, prompt discontinuation of paracetamol and close monitoring, is recommended. The measurement of urinary 5-oxoproline may be useful to identify pyroglutamic acidosis as underlying cause of HAGMA in patients with multiple risk factors.

Sorbitol and maltitol may cause gastrointestinal discomfort and have a mild laxative effect. Each 5 ml spoonful of this product contains 0.97g sorbitol liquid and 2.72g of maltitol liquid. Calorific values: 2.6 kcal/g sorbitol and 2.3 kcal/g maltitol.
Due to the presence of maltitol liquid (E965) and sorbitol liquid (E420), patients with rare hereditary problems of fructose intolerance should not take this medicine.

Ethyl (E214), Propyl (E216) and Methyl (E218) parahydroxybenzoate may cause allergic reactions (possibly delayed).

Carmoisine (E122) may cause allergic reactions.

This medicine contains less than 1 mmol sodium (23 mg) per 5ml, that is to say essentially ‘sodium-free’.

This medicine contains 14.32mg propylene glycol (E1520) in each 5ml dose, which is equivalent to 2.86mg/ml. Caution in babies less than 4 weeks old. Co-administration with any substrate for alcohol dehydrogenase such as ethanol may induce serious adverse effects in neonates.

This medicine contains 0.16mg benzyl alcohol in each 5ml which is equivalent to 0.03mg/ml. Benzyl alcohol may cause allergic reactions. Benzyl alcohol has been linked with the risk of severe side effects including breathing problems (“gasping syndrome”) in young children. Caution in newborn babies (up to 4 weeks old). Caution in children under 3 years old; do not use for more than 1 week due to increased risk due to accumulation.

Ask your doctor or pharmacist for advice if you are pregnant or breastfeeding, or if you have a liver or kidney disease. This is because large amounts of benzyl alcohol can build-up in your body and may cause side effects (called "metabolic acidosis")

Patients should be informed about the signs of serious skin reactions and use of the drug should be discontinued at the first appearance of skin rash or any other sign of hypersensitivity.

The label contains the following statements:

Contains paracetamol.
Do not give anything else containing paracetamol while giving this medicine.
Do not give more medicine than the label tells you to. If your child does not get better, talk to your doctor.
For oral use only.
Always use the syringe supplied with the pack. Do not give to babies less than 2 months of age.
For infants 2-3 months no more than 2 doses should be given. Do not give more than 4 doses in any 24 hour period.
Leave at least 4 hours between doses.
Do not give this medicine to your child for more than 3 days without speaking to your doctor or pharmacist.
As with all medicines, if your child is currently taking any other medicine consult your doctor or pharmacist before using this product.
Keep out of the sight and reach of children.
Do not store above 25°C. Keep bottle in the outer carton.
It is important to shake the bottle for at least 10 seconds before use.

Talk to a doctor at once if your child takes too much of this medicine, even if they seem well.

The leaflet contains the following statements:

Talk to a doctor at once if your child takes too much of this medicine, even if they seem well. This is because too much paracetamol can cause delayed, serious liver damage.

Very rare cases of serious skin reactions have been reported. Symptoms may include:

- Skin reddening
- Blisters
- Rash

If skin reactions occur or existing skin symptoms worsen, stop use and seek medical help right away.

4.5 Interaction with other medicinal products and other forms of interaction

Drugs which induce hepatic microsomal enzymes

Metabolism of paracetamol possibly accelerated by carbamazepine, fosphenytoin, phenytoin, phenobarbital, primidone (also isolated reports of hepatotoxicity).

The speed of absorption of paracetamol may be increased by metoclopramide or domperidone and absorption reduced by cholestyramine.

The anticoagulant effect of warfarin and other coumarins may be enhanced by prolonged regular use of paracetamol with increased risk of bleeding; occasional doses have no significant effect.

Caution should be taken when paracetamol is used concomitantly with flucloxacillin as concurrent intake has been associated with high anion gap metabolic acidosis due to pyroglutamic acidosis, especially in patients with risks factors (see section 4.4).

Chronic alcohol intake can increase the hepatotoxicity of paracetamol overdose and may have contributed to the acute pancreatitis reported in one patient who had taken an overdose of paracetamol. Acute alcohol intake may diminish an individual's ability to metabolise large doses of paracetamol, the plasma half-life of which can be prolonged.

4.6 Fertility, pregnancy and lactation

Pregnancy
A large amount of data on pregnant women indicate neither malformative, nor feto/neonatal toxicity. Epidemiological studies on neurodevelopment in children exposed to paracetamol in utero show inconclusive results. If clinically needed, paracetamol can be used during pregnancy however it should be used at the lowest effective dose for the shortest possible time and at the lowest possible frequency.

When given to the mother in therapeutic doses (1 g single dose), paracetamol crosses the placenta into foetal circulation as early as 30 minutes after ingestion and is metabolised in the foetus by conjugation with sulfate and increasingly with glutathione.

Breast-feeding
Paracetamol is excreted in breast milk but not in a clinically significant amount. Available published data do not contraindicate breast feeding.

Fertility
There is no information relating to the effects of this medicine on fertility.

4.7 Effects on ability to drive and use machines

None known

4.8 Undesirable effects

Adverse drug reactions (ADRs) identified during clinical trials and post-marketing experience with paracetamol are listed below by System Organ Class (SOC).

The frequencies are defined according to the following convention:

Very common	≥1/10
Common	≥1/100 to <1/10
Uncommon	≥1/1,000 to <1/100)
Rare	≥1/10,000 to <1/1,000
Very rare	<1/10,000
Not known	(cannot be estimated from available data).

ADRs are presented by frequency category based on 1) incidence in adequately designed clinical trials or epidemiology studies, if available or 2) when incidence is unavailable, frequency category is listed as Not known.

System Organ Class (SOC)	Frequency	Adverse Drug Reaction (Preferred Term)
Blood and lymphatic system disorders	Not known	Blood disorder (including thrombocytopenia and agranulocytosis)[1]
Immune System disorders	Very rare Very rare	Anaphylactic reaction Hypersensitivity
Hepatobiliary disorders	Not known	Liver injury[2]
Skin and Subcutaneous Tissue disorders	Very rare Not known Not known Not known	Rash Fixed eruption Rash pruritic Urticaria
Renal and urinary disorders	Uncommon Not known	Nephropathy toxic Renal papillary necrosis[3]
Investigations	Not known	Transaminases increased[4]
Metabolism and nutrition disorders	Not known	High anion gap metabolic acidosis

[1] Reported following paracetamol use, but not necessarily causally related to the drug
[2] Chronic hepatic necrosis has been reported in a patient who took daily therapeutic doses of paracetamol for about a year
[3] Reported after prolonged administration
[4] Low level transaminase elevations may occur in some patients taking therapeutic doses of paracetamol; these elevations are not accompanied with liver failure and usually resolve with continued therapy or discontinuation of paracetamol.

Very rare cases of serious skin reactions have been reported.

Chronic hepatic necrosis has been reported in a patient who took daily therapeutic doses of paracetamol for about a year and liver damage has been reported after daily ingestion of excessive amounts for shorter periods. A review of a group of patients with chronic active hepatitis failed to reveal differences in the abnormalities of liver function in those who were long-term users of paracetamol nor was the control of their disease improved after paracetamol withdrawal.

High anion gap metabolic acidosis.

Cases of high anion gap metabolic acidosis due to pyroglutamic acidosis have been observed in patients with risk factors using paracetamol (see section 4.4). Pyroglutamic acidosis may occur as a consequence of low glutathione levels in these patients.

Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the Yellow Card Scheme at: *www.mhra.gov.uk/yellowcard* or search for MHRA Yellow Card in the Google Play or Apple App Store.

4.9 Overdose

Liver damage is possible in adults and adolescents ≥ 12 years of age) who have taken 7.5g or more of paracetamol. It is considered that excess quantities of a toxic metabolite (usually adequately detoxified by glutathione when normal doses of paracetamol are ingested) become irreversibly bound to liver tissue. Ingestion of 5g or more of paracetamol may lead to liver damage if the patient has risk factors (see below)

Risk Factors:

If the patient

a) Is on long term treatment with carbamazepine, phenobarbitone, phenytoin, primidone, rifampicin, St John's Wort or other drugs that induce liver enzymes

OR

b) Regularly consumes ethanol in excess of recommended amounts OR

c) Is likely to be glutathione deplete e.g, eating disorders, cystic fibrosis, HIV infection, starvation, cachexia

Symptoms

Symptoms of paracetamol overdosage in the first 24 hours are pallor, nausea, hyperhidrosis, malaise, vomiting, anorexia, and abdominal pain. Liver damage may become apparent 12 to 48 hours after ingestion. This may include hepatomegaly, liver tenderness, jaundice, acute hepatic failure and hepatic necrosis. Abnormalities of glucose metabolism and metabolic acidosis may occur. Blood bilirubin, hepatic enzymes, INR, prothrombin time, blood phosphate and blood lactate may be increased.

In severe poisoning, hepatic failure may progress to encephalopathy, haemorrhage, hypoglycaemia, cerebral oedema and death. Acute renal failure with acute tubular necrosis, strongly suggested by loin pain, haematuria and proteinuria, may develop even in the absence of severe liver damage. Cardiac arrhythmias and pancreatitis have been reported.

Haemolytic anaemia (in patients with glucose-6-phosphate dehydrogenase [G6PD]

deficiency): Haemolysis has been reported in patients with G6PD deficiency, with use of paracetamol in overdose.

Management

Immediate treatment is essential in the management of paracetamol overdose. Despite a lack of significant early symptoms, patients should be referred to hospital urgently for immediate medical attention. Symptoms may be limited to nausea or vomiting and may not reflect the severity of the overdose or the risk of organ damage. Management should be in accordance with established treatment guidelines, see BNF overdose section.

Treatment with activated charcoal should be considered if the overdose has been taken within 1 hour. Plasma paracetamol concentrations should be measured at 4 hours or later after ingestion (earlier concentrations are unreliable). Treatment with N-acetylcysteine may be used up to 24 hours after ingestion of paracetamol, however the maximum protective effect is obtained up to 8 hours post-ingestion. The effectiveness of the antidote declines sharply after this time. If required the patient should be given intravenous N-acetylcysteine, in line with the established dosage schedule. If vomiting is not a problem oral methionine may be a suitable alternative for remote areas, outside hospital. Management of patient who present with serious hepatic dysfunction beyond 24h from ingestion should be discussed with the NPIS or a liver unit.

5 PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Other Analgesics and Antipyretics (Anilides) ATC Code: N02 BE01

Paracetamol has analgesic and antipyretic effects similar to those of aspirin and is useful in the treatment of mild to moderate pain. It has only weak anti-inflammatory effects.

5.2 Pharmacokinetic properties

Absorption
Paracetamol is rapidly and almost completely absorbed from the gastrointestinal tract. Peak plasma concentrations are reached 30-90 minutes post dose and the plasma half- life is in the range of 1 to 3 hours after therapeutic doses.

Distribution
Drug is widely distributed throughout most body fluids.

Biotransformation
Metabolism occurs almost entirely via hepatic conjugation with glucuronic acid (about 60%), sulphuric acid (about 35%) or cysteine (about 3%). Small amounts

of hydroxylated and deacetylated metabolites have also been detected.

Children have less capacity for glucuronidation of the drug than do adults.

In overdosage there is increased N-hydroxylation followed by glutathione conjugation. When the latter is exhausted, reaction with hepatic proteins is increased leading to necrosis.

Elimination
Following therapeutic doses 90-100% of the drug is recovered in the urine within 24 hours.

5.3 Preclinical safety data

Preclinical data reveal no special hazard for humans based on conventional studies of single and repeated dose toxicity, genotoxicity, and carcinogenicity.

Conventional studies using the currently accepted standards for the evaluation of toxicity to reproduction and development are not available.

6 PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Maltitol liquid
Sorbitol liquid (non crystallising) (E420) Glycerol
Microcrystalline cellulose and carmellose sodium Xanthan gum
Ethyl parahydroxybenzoate (E214) Methyl parahydroxybenzoate (E218) Propyl parahydroxybenzoate (E216) Polysorbate 80
Strawberry flavour (containing propylene glycol (E1520) and benzyl alcohol)
Carmoisine (E122)
Purified water

6.2 Incompatibilities

None known

6.3 Shelf life

3 years

6.4 Special precautions for storage

Do not store above 25ºC. Keep bottle in the outer carton.

6.5 Nature and contents of container

Amber glass bottle with a two-piece white plastic child-resistant external cap, fitted with an inner plastic cap, including a tamper evident ring fitted with a polyethylene or polyvinylidene chloride (PVDC) polyethylene laminate faced wad.

or

Amber glass bottle with a two-piece white plastic child-resistant external cap (in polypropylene), fitted with an inner plastic cap, including a tamper evident ring, in high density polyethylene (HDPE). The cap contains a plug made of Low Density Polyethylene (LDPE).

Or

Amber glass bottle with a two-piece white plastic child-resistant external cap (in polypropylene), fitted with an inner plastic cap, including a tamper evident ring, in high density polyethylene (HDPE). A HDPE disk platine and a Press-In-Bottle Adapter (PIBA, commonly named plug), made of Low-Density Polyethylene (LDPE).

Pack sizes
60ml, 70ml and 100ml. A syringe with a 5 ml and 2.5 ml measure is supplied with this pack. Not all pack sizes may be marketed.

6.6 Special precautions for disposal <and other handling>

No special requirements for disposal.

7 MARKETING AUTHORISATION HOLDER

McNeil Products Limited
1 Station Hill Square
Station Hill
Reading
RG1 1LN
UK

8 MARKETING AUTHORISATION NUMBER(S)

PL 15513/0123

9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

03/06/2005

10 DATE OF REVISION OF THE TEXT

25 March 2026

Legal Status: GSL for bottles of 100ml or less

SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

CALPOL Sugar Free Infant suspension

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

CALPOL Sugar Free Infant suspension contains 120 mg Paracetamol in each 5 ml.

Excipients: maltitol liquid ((E965), contains 2.72 g of maltitol liquid in each 5ml), sorbitol liquid ((E420) contains 0.97 g of sorbitol liquid per 5ml), sodium (contains 0.86mg per 5ml), benzyl alcohol, propylene glycol (E1520), methyl parahydroxybenzoate (E218), ethyl parahydroxybenzoate (E214), propyl parahydroxybenzoate (E216) and carmoisine (E122). See section 4.4 for further information.

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Oral Suspension.

A pink strawberry flavoured suspension.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

CALPOL Sugar Free Infant suspension is indicated for the treatment of mild to moderate pain and as an antipyretic. It can be used in many conditions including headache, toothache, earache, teething, sore throat, colds & influenza, aches and pains and post-immunisation fever.

4.2 Posology and Method of Administration

For the relief of fever after vaccinations at 2, 3 and 4 months
2.5ml. This dose may be given up to 4 times a day starting at the time of vaccination. Do not give more than 4 doses in any 24 hour period. Leave at least 4 hours between doses. If your baby still needs this medicine two days after receiving the vaccine talk to your doctor or pharmacist.

Age : 2 – 3 months	**Dose**
Pain and other causes of fever - if your baby weighs over 4 kg and was born after 37 weeks	2.5 ml If necessary, after 4-6 hours, give a second 2.5 ml dose
• Do not give to babies less than 2 months of age. • Leave at least 4 hours between doses. • Do not give more than 2 doses. This is to ensure that fever that may be due to a serious infection is quickly diagnosed. If your child is still feverish after two doses, talk to your doctor or pharmacist.	

Children aged 3 months – 6 years:

Child's Age	**How Much**	**How often (in 24 hours)**
3 – 6 months	2.5 ml	4 times
6 – 24 months	5 ml	4 times
2 – 4 years	7.5 ml (5 ml + 2.5 ml)	4 times
4 – 6 years	10 ml (5 ml + 5 ml)	4 times
• Do not give more than 4 doses in any 24 hour period • Leave at least 4 hours between doses • Do not give this medicine to your child for more than 3 days without speaking to your doctor or pharmacist		

It is important to **shake the bottle** for at least 10 seconds before use.

The Elderly:

In the elderly, the rate and extent of paracetamol absorption is normal but plasma half-life is longer and paracetamol clearance is lower than in young adults.

4.3 Contraindications

Hypersensitivity to paracetamol or to any of the excipients listed in section 6.1.

4.4 Special warnings and precautions for use

Do not exceed the recommended dose. Taking more than the recommended dose (overdose) may cause liver damage. In case of overdose, get medical help straight

away. Quick medical attention is critical for adults as well as children even if signs and symptoms are not noticed.

Taking this product with other paracetamol-containing medicines could lead to overdose and should therefore be avoided.

Care is advised in the administration of paracetamol to patients with severe renal or severe hepatic impairment. The hazards of overdose are greater in those with non-cirrhotic alcoholic liver disease. Chronic alcohol users should consult a doctor before use.

Cases of high anion gap metabolic acidosis (HAGMA) due to pyroglutamic acidosis have been reported in patients with severe illness such as severe renal impairment and sepsis, or in patients with malnutrition or other sources of glutathione deficiency (e.g. chronic alcoholism), who were treated with paracetamol at therapeutic dose for a prolonged period or a combination of paracetamol and flucloxacillin. If HAGMA due to pyroglutamic acidosis is suspected, prompt discontinuation of paracetamol and close monitoring, is recommended. The measurement of urinary 5-oxoproline may be useful to identify pyroglutamic acidosis as underlying cause of HAGMA in patients with multiple risk factors.

Sorbitol and maltitol may cause gastrointestinal discomfort and have a mild laxative effect. Each 5 ml spoonful of this product contains 0.97g sorbitol liquid and 2.72g of maltitol liquid. Calorific values: 2.6 kcal/g sorbitol and 2.3 kcal/g maltitol.
Due to the presence of maltitol liquid (E965) and sorbitol liquid (E420), patients with rare hereditary problems of fructose intolerance should not take this medicine.

Ethyl (E214), Propyl (E216) and Methyl (E218) parahydroxybenzoate may cause allergic reactions (possibly delayed).

Carmoisine (E122) may cause allergic reactions.

This medicine contains less than 1 mmol sodium (23 mg) per 5ml, that is to say essentially ‘sodium-free’.

This medicine contains 14.32mg propylene glycol (E1520) in each 5ml dose, which is equivalent to 2.86mg/ml. Caution in babies less than 4 weeks old. Co-administration with any substrate for alcohol dehydrogenase such as ethanol may induce serious adverse effects in neonates.

This medicine contains 0.16mg benzyl alcohol in each 5ml which is equivalent to 0.03mg/ml. Benzyl alcohol may cause allergic reactions. Benzyl alcohol has been linked with the risk of severe side effects including breathing problems (“gasping syndrome”) in young children. Caution in newborn babies (up to 4 weeks old). Caution in children under 3 years old; do not use for more than 1 week due to increased risk due to accumulation.

Ask your doctor or pharmacist for advice if you are pregnant or breastfeeding, or if you have

a liver or kidney disease. This is because large amounts of benzyl alcohol can build-up in your body and may cause side effects (called "metabolic acidosis")

Patients should be informed about the signs of serious skin reactions and use of the drug should be discontinued at the first appearance of skin rash or any other sign of hypersensitivity.

The label contains the following statements:
Contains paracetamol.
Do not give anything else containing paracetamol while giving this medicine.
Do not give more medicine than the label tells you to. If your child does not get better, talk to your doctor
For oral use only.
Always use the syringe supplied with the pack.
Do not give to babies less than 2 months of age.
For infants 2-3 months no more than 2 doses should be given.
Do not give more than 4 doses in any 24 hour period.
Leave at least 4 hours between doses.
Do not give this medicine to your child for more than 3 days without speaking to your doctor or pharmacist.
As with all medicines, if your child is currently taking any other medicine consult your doctor or pharmacist before using this product.
Keep out of the sight and reach of children.
Do not store above 25°C. Keep bottle in the outer carton.
It is important to shake the bottle for at least 10 seconds before use.

Talk to a doctor at once if your child takes too much of this medicine, even if they seem well.

The leaflet contains the following statements:
Talk to a doctor at once if your child takes too much of this medicine, even if they seem well. This is because too much paracetamol can cause delayed, serious liver damage.

Very rare cases of serious skin reactions have been reported. Symptoms may include:
- Skin reddening
- Blisters
- Rash

If skin reactions occur or existing skin symptoms worsen, stop use and seek medical help right away.

4.5 Interaction with other medicinal products and other forms of interaction

Drugs which induce hepatic microsomal enzymes
Metabolism of paracetamol possibly accelerated by carbamazepine, fosphenytoin, phenytoin, phenobarbital, primidone (also isolated reports of hepatotoxicity).

The speed of absorption of paracetamol may be increased by metoclopramide or domperidone and absorption reduced by cholestyramine.

The anticoagulant effect of warfarin and other coumarins may be enhanced by prolonged regular use of paracetamol with increased risk of bleeding; occasional doses have no significant effect.

Caution should be taken when paracetamol is used concomitantly with flucloxacillin as concurrent intake has been associated with high anion gap metabolic acidosis due to pyroglutamic acidosis, especially in patients with risks factors (see section 4.4).

Chronic alcohol intake can increase the hepatotoxicity of paracetamol overdose and may have contributed to the acute pancreatitis reported in one patient who had taken an overdose of paracetamol. Acute alcohol intake may diminish an individual's ability to metabolise large doses of paracetamol, the plasma half-life of which can be prolonged.

4.6 Fertility, pregnancy and lactation

Pregnancy
A large amount of data on pregnant women indicate neither malformative, nor feto/neonatal toxicity. Epidemiological studies on neurodevelopment in children exposed to paracetamol in utero show inconclusive results. If clinically needed, paracetamol can be used during pregnancy however it should be used at the lowest effective dose for the shortest possible time and at the lowest possible frequency.

When given to the mother in therapeutic doses (1 g single dose), paracetamol crosses the placenta into foetal circulation as early as 30 minutes after ingestion and is metabolised in the foetus by conjugation with sulfate and increasingly with glutathione.

Breast-feeding
Paracetamol is excreted in breast milk but not in a clinically significant amount. Available published data do not contraindicate breast feeding.

Fertility
There is no information relating to the effects of this medicine on fertility.

4.7 Effects on ability to drive and use machines

None known.

4.8 Undesirable effects

Adverse drug reactions (ADRs) identified during clinical trials and post-marketing experience with paracetamol are listed below by System Organ Class (SOC).

The frequencies are defined according to the following convention:

Very common	≥1/10
Common	≥1/100 to <1/10
Uncommon	≥1/1,000 to <1/100)

Rare	≥1/10,000 to <1/1,000
Very rare	<1/10,000
Not known	(cannot be estimated from available data).

ADRs are presented by frequency category based on 1) incidence in adequately designed clinical trials or epidemiology studies, if available or 2) when incidence is unavailable, frequency category is listed as Not known.

System Organ Class (SOC)	Frequency	Adverse Drug Reaction (Preferred Term)
Blood and lymphatic system disorders	Not known	Blood disorder (including thrombocytopenia and agranulocytosis) [1]
Immune System Disorders	Very rare Very rare	Anaphylactic reaction Hypersensitivity
Hepatobiliary disorders	Not known	Liver injury[2]
Skin and Subcutaneous Tissue disorders	Very rare Not known Not known Not known	Rash Fixed eruption Rash pruritic Urticaria
Renal and urinary disorders	Uncommon Not known	Nephropathy toxic Renal papillary necrosis[3]
Investigations	Not known	Transaminases increased[4]
Metabolism and nutrition disorders	Not known	High anion gap metabolic acidosis

[1] Reported following paracetamol use, but not necessarily causally related to the drug
[2] Chronic hepatic necrosis has been reported in a patient who took daily therapeutic doses of paracetamol for about a year
[3] Reported after prolonged administration
[4] Low level transaminase elevations may occur in some patients taking therapeutic doses of paracetamol; these elevations are not accompanied with liver failure and usually resolve with continued therapy or discontinuation of paracetamol.

Very rare cases of serious skin reactions have been reported.

Chronic hepatic necrosis has been reported in a patient who took daily therapeutic doses of paracetamol for about a year and liver damage has been reported after daily ingestion of excessive amounts for shorter periods. A review of a group of patients with chronic active hepatitis failed to reveal differences in the abnormalities of liver function in those who were long-term users of paracetamol nor was the control of their disease improved after paracetamol withdrawal.

High anion gap metabolic acidosis.
Cases of high anion gap metabolic acidosis due to pyroglutamic acidosis have been observed in patients with risk factors using paracetamol (see section 4.4). Pyroglutamic acidosis may occur as a consequence of low glutathione levels in these patients.

Reporting of suspected adverse reactions
Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the Yellow Card Scheme at: *www.mhra.gov.uk/yellowcard* or search for MHRA Yellow Card in the Google Play or Apple App Store.

4.9 Overdose

Liver damage is possible in adults and adolescents (≥12 years of age) who have taken 7.5g or more of paracetamol. It is considered that excess quantities of a toxic metabolite (usually adequately detoxified by glutathione when normal doses of paracetamol are ingested) become irreversibly bound to liver tissue. Ingestion of 5g or more of paracetamol may lead to liver damage if the patient has risk factors (see below).

Risk Factors:
If the patient

a) Is on long term treatment with carbamezipine, phenobarbital, phenytoin, primidone, rifampicin, St John's Wort or other drugs that induce liver enzymes.
Or
b) Regularly consumes ethanol in excess of recommended amounts.
Or
c) Is likely to be glutathione deplete e.g. eating disorders, cystic fibrosis, HIV infection, starvation, cachexia.

Symptoms
Symptoms of paracetamol overdosage in the first 24 hours are pallor, nausea, hyperhidrosis, malaise, vomiting, anorexia, and abdominal pain. Liver damage may become apparent 12 to 48 hours after ingestion. This may include hepatomegaly, liver tenderness, jaundice, acute hepatic failure and hepatic necrosis. Abnormalities of glucose metabolism and metabolic acidosis may occur. Blood bilirubin, hepatic enzymes, INR, prothrombin time, blood phosphate and blood lactate may be increased.
In severe poisoning, hepatic failure may progress to encephalopathy, haemorrhage, hypoglycaemia, cerebral oedema and death. Acute renal failure with acute tubular necrosis, strongly suggested by loin pain, haematuria and proteinuria, may develop even in the absence of severe liver damage. Cardiac arrhythmias and pancreatitis have been reported.

Haemolytic anaemia (in patients with glucose-6-phosphate dehydrogenase [G6PD] deficiency): Haemolysis has been reported in patients with G6PD deficiency, with use of paracetamol in overdose.

Management
Immediate treatment is essential in the management of paracetamol overdose. Despite a lack of significant early symptoms, patients should be referred to hospital urgently for immediate medical attention. Symptoms may be limited to nausea or vomiting and may not reflect the severity of overdose or the risk of organ damage.

Management should be in accordance with established treatment guidelines, see BNF overdose section.

Treatment with activated charcoal should be considered if the overdose has been taken within 1 hour. Plasma paracetamol concentration should be measured at 4 hours or later after ingestion (earlier concentrations are unreliable). Treatment with N-acetylcysteine may be used up to 24 hours after ingestion of paracetamol, however, the maximum protective effect is obtained up to 8 hours post-ingestion. The effectiveness of the antidote declines sharply after this time. If required the patient should be given intravenous N-acetylcysteine, in line with the established dosage schedule. If vomiting is not a problem, oral methionine may be a suitable alternative for remote areas, outside hospital. Management of patients who present with serious hepatic dysfunction beyond 24h from ingestion should be discussed with the NPIS or a liver unit.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Other Analgesics and Antipyretics (Anilides)
ATC Code: N02 BE01

Paracetamol has analgesic and antipyretic effects similar to those of aspirin and is useful in the treatment of mild to moderate pain. It has only weak anti-inflammatory effects.

5.2 Pharmacokinetic properties

Absorption
Paracetamol is rapidly and almost completely absorbed from the gastrointestinal tract. Peak plasma concentrations are reached 30-90 minutes post dose and the plasma half-life is in the range of 1 to 3 hours after therapeutic doses.

Distribution
Drug is widely distributed throughout most body fluids.

Biotransformation
Metabolism occurs almost entirely via hepatic conjugation with glucuronic acid (about 60%), sulphuric acid (about 35%) or cysteine (about 3%). Small amounts of hydroxylated and deacetylated metabolites have also been detected.

Children have less capacity for glucuronidation of the drug than do adults.

In overdosage there is increased N-hydroxylation followed by glutathione conjugation. When the latter is exhausted, reaction with hepatic proteins is increased leading to necrosis.

Elimination

Following therapeutic doses 90-100% of the drug is recovered in the urine within 24 hours.

5.3 Preclinical safety data

Preclinical data reveal no special hazard for humans based on conventional studies of single and repeated dose toxicity, genotoxicity, and carcinogenicity.

Conventional studies using the currently accepted standards for the evaluation of toxicity to reproduction and development are not available.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Maltitol liquid
Sorbitol solution (70% non crystallising) (E420)
Glycerol
Microcrystalline cellulose and carmellose sodium
Xanthan gum
Ethyl parahydroxybenzoate (E214)
Methyl parahydroxybenzoate (E218)
Propyl parahydroxybenzoate (E216)
Polysorbate 80
Strawberry flavour (containing propylene glycol (E1520) and benzyl alcohol)
Carmoisine (E122)
Purified water

6.2 Incompatibilities

None known

6.3 Shelf life

3 years

6.4 Special precautions for storage

Do not store above 25°C. Keep bottle in the outer carton.

6.5 Nature and contents of container

Amber glass bottle with an aluminium cap fitted with a polyethylene wad.
(1000 ml only).

Or
Amber glass bottle with a two-piece white plastic child-resistant external cap, fitted with an inner plastic cap, including a tamper evident ring fitted with a polyethylene or polyvinylidene chloride (PVDC) polyethylene laminate faced wad.

Or
Amber glass bottle with a two-piece white plastic child-resistant external cap (in polypropylene), fitted with an inner plastic cap, including a tamper evident ring, in high density polyethylene (HDPE). The cap contains a plug made of Low Density Polyethylene (LDPE).

Or
Amber glass bottle with a two-piece white plastic child-resistant external cap (in polypropylene), fitted with an inner plastic cap, including a tamper evident ring, in high density polyethylene (HDPE). A HDPE disk platine and a Press-In-Bottle Adapter (PIBA, commonly named plug), made of Low-Density Polyethylene (LDPE).

Pack sizes
140 ml, 200 ml and 1000 ml. A syringe with a 5 ml and 2.5 ml measure is supplied with this pack. Not all pack sizes may be marketed.

6.6 Special precautions for disposal

No special requirements for disposal.

7 MARKETING AUTHORISATION HOLDER

McNeil Products Limited
1 Station Hill Square
Station Hill
Reading
RG1 1LN
UK

8 MARKETING AUTHORISATION NUMBER (S)

PL 15513/0006

9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

28 April 1997 / 13th September 2004

10 DATE OF REVISION OF THE TEXT

SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

CALPOL Sugar Free Infant Suspension Sachets

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Calpol Sugar Free Infant Suspension Sachets contains 120 mg Paracetamol in each 5 ml.

Excipients: maltitol liquid ((E965), contains 2.72 g of maltitol liquid in each 5 ml), sorbitol liquid ((E420) contains 0.97 g of sorbitol liquid per 5ml), sodium (contains 0.86mg per 5ml), benzyl alcohol, propylene glycol (E1520), methyl parahydroxybenzoate (E218), ethyl parahydroxybenzoate (E214), propyl parahydroxybenzoate (E216) and carmoisine (E122). See section 4.4 for further information.

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Oral Suspension.

A pink strawberry flavoured suspension

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

Calpol Sugar Free Infant Suspension Sachets is indicated for the treatment of mild to moderate pain and as an antipyretic. It can be used in many conditions including headache, toothache, earache, teething, sore throat, colds & influenza, aches and pains and post-immunisation fever.

4.2 Posology and method of administration

For the relief of fever after vaccinations at 2, 3 and 4 months
2.5ml. This dose may be given up to 4 times a day starting at the time of vaccination. Do not give more than 4 doses in any 24 hour period. Leave at least 4 hours between doses. If your baby still needs this medicine two days after receiving the vaccine talk to your doctor or pharmacist.

Age : 2 – 3 months	Dose
Pain and other causes of fever - if your baby weighs over 4 kg and was born after 37 weeks	2.5 ml If necessary, after 4-6 hours, give a second 2.5 ml dose
• Do not give to babies less than 2 months of age. • Leave at least 4 hours between doses. • Do not give more than 2 doses. This is to ensure that fever that may be due to a serious infection is quickly diagnosed. If your child is still feverish after two doses, talk to your doctor or pharmacist.	

Children aged 3 months – 6 years:

Child's Age	How Much	How often (in 24 hours)
3 – 6 months	One 2.5 ml spoonful (small end)	4 times
6 – 24 months	One 5 ml spoonful (large end)	4 times
2 – 4 years	One 5 ml spoonful (large end) and one 2.5 ml spoonful (small end)	4 times
4 – 6 years	Two 5 ml spoonfuls (large end)	4 times
• Do not give more than 4 doses in any 24 hour period • Leave at least 4 hours between doses • Do not give this medicine to your child for more than 3 days without speaking to your doctor or pharmacist		

It is important to **massage the sachet** for before use.

The Elderly:

In the elderly, the rate and extent of paracetamol absorption is normal but plasma half-life is longer and paracetamol clearance is lower than in young adults.

4.3 Contra-indications

Hypersensitivity to paracetamol or to any of the excipients listed in section 6.1.

4.4 Special warnings and precautions for use

Do not exceed the recommended dose. Taking more than the recommended dose (overdose) may cause liver damage. In case of overdose, get medical help straight away. Quick medical attention is critical for adults as well as children even if signs or symptoms are not noticed.

Taking this product with other paracetamol-containing medicines could lead to overdose and should therefore be avoided.

Care is advised in the administration of paracetamol to patients with severe renal or severe hepatic impairment. The hazards of overdose are greater in those with non-cirrhotic alcoholic liver disease. Chronic alcohol users should consult a doctor before use.

Cases of high anion gap metabolic acidosis (HAGMA) due to pyroglutamic acidosis have been reported in patients with severe illness such as severe renal impairment and sepsis, or in patients with malnutrition or other sources of glutathione deficiency (e.g. chronic alcoholism), who were treated with paracetamol at therapeutic dose for a prolonged period or a combination of paracetamol and flucloxacillin. If HAGMA due to pyroglutamic acidosis is suspected, prompt discontinuation of paracetamol and close monitoring, is recommended. The measurement of urinary 5-oxoproline may be useful to identify pyroglutamic acidosis as underlying cause of HAGMA in patients with multiple risk factors.

Sorbitol and maltitol may cause gastrointestinal discomfort and have a mild laxative effect. Each 5 ml spoonful of this product contains 0.97g sorbitol liquid and 2.72g of maltitol liquid. Calorific values: 2.6 kcal/g sorbitol and 2.3 kcal/g maltitol.

Due to the presence of maltitol liquid (E965) and sorbitol liquid (E420), patients with rare hereditary problems of fructose intolerance should not take this medicine.

Ethyl (E214), Propyl (E216) and Methyl (E218) parahydroxybenzoate may cause allergic reactions (possibly delayed).

Carmoisine (E122) may cause allergic reactions.

This medicine contains less than 1 mmol sodium (23 mg) per 5ml, that is to say essentially ‘sodium-free’.

This medicine contains 14.32mg propylene glycol (E1520) in each 5ml dose, which is equivalent to 2.86mg/ml. Caution in babies less than 4 weeks old. Co-administration with any substrate for alcohol dehydrogenase such as ethanol may induce serious adverse effects in neonates.

This medicine contains 0.16mg benzyl alcohol in each 5ml which is equivalent to 0.03mg/ml. Benzyl alcohol may cause allergic reactions. Benzyl alcohol has been linked with the risk of severe side effects including breathing problems (“gasping syndrome”) in young children. Caution in newborn babies (up to 4 weeks old). Caution in children under 3 years old; do not use for more than 1 week due to increased risk due to accumulation.

Ask your doctor or pharmacist for advice if you are pregnant or breastfeeding, or if you have a liver or kidney disease. This is because large amounts of benzyl alcohol can build-up in your body and may cause side effects (called "metabolic acidosis")

Patients should be informed about the signs of serious skin reactions and use of the drug should be discontinued at the first appearance of skin rash or any other sign of hypersensitivity.

The label contains the following statements:
Contains paracetamol.
Do not give anything else containing paracetamol while giving this medicine.
Do not give more medicine than the label tells you to. If your child does not get better, talk to your doctor.
For oral use only.
Do not overfill the spoon.
Always use the spoon supplied with the pack.
Do not give to babies less than 2 months of age.
For infants 2-3 months no more than 2 doses should be given.
Do not give more than 4 doses in any 24 hour period.
Leave at least 4 hours between doses.
Do not give this medicine to your child for more than 3 days without speaking to your doctor or pharmacist.
As with all medicines, if your child is currently taking any other medicine consult your doctor or pharmacist before using this product.
Keep out of the sight and reach of children.
Massage contents of sachet before opening.
Do not store above 25°C. Keep sachets in the outer carton.
Talk to a doctor at once if your child takes too much of this medicine, even if they seem well.

The leaflet contains the following statements:
Talk to a doctor at once if your child takes too much of this medicine, even if they seem well. This is because too much paracetamol can cause delayed, serious liver damage.

Very rare cases of serious skin reactions have been reported. Symptoms may include:
- Skin reddening
- Blisters
- Rash

If skin reactions occur or existing skin symptoms worsen, stop use and seek medical help right away.

4.5 Interaction with other medicinal products and other forms of interaction

Drugs which induce hepatic microsomal enzymes

Metabolism of paracetamol possibly accelerated by carbamazepine, fosphenytoin, phenytoin, phenobarbital, primidone (also isolated reports of hepatotoxicity).

The speed of absorption of paracetamol may be increased by metoclopramide or domperidone and absorption reduced by cholestyramine.

The anticoagulant effect of warfarin and other coumarins may be enhanced by prolonged regular use of paracetamol with increased risk of bleeding; occasional doses have no significant effect.

Caution should be taken when paracetamol is used concomitantly with flucloxacillin as concurrent intake has been associated with high anion gap metabolic acidosis due to pyroglutamic acidosis, especially in patients with risks factors (see section 4.4)

Chronic alcohol intake can increase the hepatotoxicity of paracetamol overdose and may have contributed to the acute pancreatitis reported in one patient who had taken an overdose of paracetamol. Acute alcohol intake may diminish an individual's ability to metabolise large doses of paracetamol, the plasma half-life of which can be prolonged.

4.6 Fertility, pregnancy and lactation

Pregnancy
A large amount of data on pregnant women indicate neither malformative, nor feto/neonatal toxicity. Epidemiological studies on neurodevelopment in children exposed to paracetamol in utero show inconclusive results. If clinically needed, paracetamol can be used during pregnancy however it should be used at the lowest effective dose for the shortest possible time and at the lowest possible frequency.

When given to the mother in therapeutic doses (1 g single dose), paracetamol crosses the placenta into foetal circulation as early as 30 minutes after ingestion and is metabolised in the foetus by conjugation with sulfate and increasingly with glutathione.

Breast-feeding
Paracetamol is excreted in breast milk but not in a clinically significant amount. Available published data do not contraindicate breast feeding.

Fertility
There is no information relating to the effects of this medicine on fertility.

4.7 Effects on ability to drive and use machines

None known.

4.8 Undesirable effects

Adverse drug reactions (ADRs) identified during clinical trials and post marketing experience with paracetamol are listed below by System Organ Class (SOC).

The frequencies are defined according to the following convention:

Very common	≥1/10
Common	≥1/100 to <1/10
Uncommon	≥1/1,000 to <1/100)
Rare	≥1/10,000 to <1/1,000
Very rare	<1/10,000
Not known	(cannot be estimated from the available data).

ADRs are presented by frequency category based on 1) incidence in adequately designed clinical trials or epidemiology studies, if available or 2) when incidence is unavailable, frequency category is listed as Not known.

System Organ Class (SOC)	Frequency	Adverse Drug Reaction (Preferred Term)
Blood and lymphatic system disorders	Not known	Blood disorder (including thrombocytopenia and agranulocytosis) [1]
Immune System Disorders	Very rare Very rare	Anaphylactic reaction Hypersensitivity
Hepatobiliary disorders	Not known	Liver injury[2]
Skin and Subcutaneous Tissue disorders	Very rare Not known Not known Not known	Rash Fixed eruption Rash pruritic Urticaria
Renal and urinary disorders	Uncommon Not known	Nephropathy toxic Renal papillary necrosis[3]
Investigations	Not known	Transaminases increased[4]
Metabolism and nutrition disorders	Not known	High anion gap metabolic acidosis

[1] Reported following paracetamol use, but not necessarily causally related to the drug
[2] Chronic hepatic necrosis has been reported in a patient who took daily therapeutic doses of paracetamol for about a year
[3] Reported after prolonged administration
[4] Low level transaminase elevations may occur in some patients taking therapeutic doses of paracetamol; these elevations are not accompanied with liver failure and usually resolve with continued therapy or discontinuation of paracetamol.

Very rare cases of serious skin reactions have been reported.

Chronic hepatic necrosis has been reported in a patient who took daily therapeutic doses of paracetamol for about a year and liver damage has been reported after daily ingestion of excessive amounts for shorter periods. A review of a group of patients with chronic active hepatitis failed to reveal differences in the abnormalities of liver function in those who were long-term users of paracetamol nor was the control of their disease improved after paracetamol withdrawal.

High anion gap metabolic acidosis.
Cases of high anion gap metabolic acidosis due to pyroglutamic acidosis have been observed in patients with risk factors using paracetamol (see section 4.4).
Pyroglutamic acidosis may occur as a consequence of low glutathione levels in these patients.

Reporting of suspected adverse reactions
Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the Yellow Card Scheme at: www.mhra.gov.uk/yellowcard or search for MHRA Yellow Card in the Google Play or Apple App Store.

4.9 **Overdose**

Liver damage is possible in adults and adolescents (≥12 years of age) who have taken 7.5g or more of paracetamol. It is considered that excess quantities of a toxic metabolite (usually adequately detoxified by glutathione when normal doses of paracetamol are ingested) become irreversibly bound to liver tissue. Ingestion of 5g or more of paracetamol may lead to liver damage if the patient has risk factors (see below)

Risk Factors:
If the patient

Is on long term treatment with carbamazepine, phenobarbitone, phenytoin, primidone, rifampicin, St John's Wort or other drugs that induce liver enzymes
OR
Regularly consumes ethanol in excess of recommended amounts
OR
c) Is likely to be glutathione deplete e.g, eating disorders, cystic fibrosis, HIV infection, starvation, cachexia

Symptoms

Symptoms of paracetamol overdosage in the first 24 hours are pallor, nausea, hyperhidrosis, malaise, vomiting, anorexia, and abdominal pain. Liver damage may become apparent 12 to 48 hours after ingestion. This may include hepatomegaly, liver tenderness, jaundice, acute hepatic failure and hepatic necrosis.

Abnormalities of glucose metabolism and metabolic acidosis may occur. Blood bilirubin, hepatic enzymes, INR, prothrombin time, blood phosphate and blood lactate may be increased.

In severe poisoning, hepatic failure may progress to encephalopathy, haemorrhage, hypoglycaemia, cerebral oedema and death. Acute renal failure with acute tubular necrosis, strongly suggested by loin pain, haematuria and proteinuria, may develop even in the absence of severe liver damage. Cardiac arrhythmias and pancreatitis have been reported.

Haemolytic anaemia (in patients with glucose-6-phosphate dehydrogenase [G6PD] deficiency): Haemolysis has been reported in patients with G6PD deficiency, with use of paracetamol in overdose.

Management
Immediate treatment is essential in the management of paracetamol overdose. Despite a lack of significant early symptoms, patients should be referred to hospital urgently for immediate medical attention. Symptoms may be limited to nausea or vomiting and may not reflect the severity of the overdose or the risk of organ damage. Management should be in accordance with established treatment guidelines, see BNF overdose section.

Treatment with activated charcoal should be considered if the overdose has been taken within 1 hour. Plasma paracetamol concentrations should be measured at 4 hours or later

after ingestion (earlier concentrations are unreliable). Treatment with N-acetylcysteine may be used up to 24 hours after ingestion of paracetamol, however the maximum protective effect is obtained up to 8 hours post-ingestion. The effectiveness of the antidote declines sharply after this time. If required the patient should be given intravenous N-acetylcysteine, in line with the established dosage schedule. If vomiting is not a problem oral methionine may be a suitable alternative for remote areas, outside hospital. Management of patient who present with serious hepatic dysfunction beyond 24h from ingestion should be discussed with the NPIS or a liver unit.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Other Analgesics and Antipyretics (Anilides)
ATC Code: N02 BE01

Paracetamol has analgesic and antipyretic effects similar to those of aspirin and is useful in the treatment of mild to moderate pain. It has only weak anti-inflammatory effects.

5.2 Pharmacokinetic properties

Paracetamol is rapidly and almost completely absorbed from the gastrointestinal tract. Peak plasma concentrations are reached 30-90 minutes post dose and the plasma half-life is in the range of 1 to 3 hours after therapeutic doses. Drug is widely distributed throughout most body fluids. Following therapeutic doses 90-100% of the drug is recovered in the urine within 24 hours almost entirely following hepatic conjugation with glucuronic acid (about 60%), sulphuric acid (about 35%) or cysteine (about 3%). Small amounts of hydroxylated and deacetylated metabolites have also been detected. Children have less capacity for glucuronidation of the drug than do adults. In overdosage there is increased N-hydroxylation followed by glutathione conjugation. When the latter is exhausted, reaction with hepatic proteins is increased leading to necrosis.

5.3 Preclinical safety data

Preclinical data reveal no special hazard for humans based on conventional studies of single and repeated dose toxicity, genotoxicity, and carcinogenicity.

Conventional studies using the currently accepted standards for the evaluation of toxicity to reproduction and development are not available.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Maltitol liquid
Sorbitol liquid (non crystallising) (E420)

Glycerol
Microcrystalline cellulose and carmellose sodium
Xanthan gum
Ethyl parahydroxybenzoate (E214)
Methyl parahydroxybenzoate (E218)
Propyl parahydroxybenzoate (E216)
Polysorbate 80
Strawberry flavour (containing propylene glycol (E1520) and benzyl alcohol)
Carmoisine (E122)
Purified water

6.2 Incompatibilities

None known

6.3 Shelf life

3 years

6.4 Special precautions for storage

Do not store above 25°C. Keep sachets in the outer carton.

6.5 Nature and contents of container

5 ml sachet composed of a laminate made of paper/PE/Aluminium/Surlyn. Pack sizes 12 or 20 sachets. A spoon with a 5 ml and 2.5 ml measure is supplied with this pack. Not all pack sizes may be marketed.

6.6 Special precautions for disposal

No special requirements for disposal.

7 MARKETING AUTHORISATION HOLDER

McNeil Products Limited
1 Station Hill Square
Station Hill
Reading
RG1 1LN
UK

8 MARKETING AUTHORISATION NUMBER

PL 15513/0155

9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

26/02/2007- 25/02/2009

10. DATE OF REVISION OF THE TEXT

03 Aug 2026

SUMMARY OF PRODUCT CHARACTERISTICS

Calpol Six Plus Sugar Free Suspension

1. NAME OF THE MEDICINAL PRODUCT

Calpol Six Plus Sugar Free Suspension

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Calpol Six Plus Sugar Free Suspension contains 250 mg Paracetamol in each 5 ml.
Excipients: maltitol liquid ((E965) contains 2.04 g maltitol liquid per 5ml), sodium (contains 1.18mg per 5ml), benzyl alcohol, propylene glycol (E1520), sorbitol liquid ((E420) contains 1.935 g sorbitol liquid per 5ml), methyl parahydroxybenzoate (E218) and propyl parahydroxybenzoate (E216).

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Oral Suspension

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

Calpol Six Plus Sugar Free Suspension is indicated for the treatment of mild to moderate pain and as an antipyretic. It can be used in many conditions including headache, toothache, earache, sore throat, colds and influenza, aches and pains and post-immunisation fever.

4.2 Posology and Method of Administration

4.2.1 Posology

Children aged 6 to 12 years:

Child's Age	How Much	How often (in 24 hours)*
Under 6 years	Not recommended	N/A
6 – 8 years	5 ml	4 times
8 – 10 years	7.5 ml (5ml+ 2.5 ml)	4 times

10 – 12 years	10 ml (5ml + 5ml)	4 times
• Do not give more than 4 doses in any 24 hour period • Leave at least 4 hours between doses • Do not give this medicine to your child for more than 3 days without speaking to your doctor or pharmacist		

Children aged 12-16 years: 10-15 ml (Two to three 5 ml doses) up to 4 times a day.

Adults and children over 16 years: 10 – 20 ml (Two to four 5 ml doses) up to 4 times a day.

It is important to **shake the bottle** for at least 10 seconds before use. <Bottle only>

It is important to **massage the sachet** before use. <Sachet only>

The Elderly:

In the elderly, the rate and extent of paracetamol absorption is normal but plasma half-life is longer and paracetamol clearance is lower than in young adults.

4.3 Contra-indications

Hypersensitivity to paracetamol or to any of the excipients listed in section 6.1.

4.4 Special warnings and precautions for use

Do not exceed the recommended dose. Taking more than the recommended dose (overdose) may cause liver damage. In case of overdose, get medical help straight away. Quick medical attention is critical for adults as well as children even if signs or symptoms are not noticed.

Care is advised in the administration of paracetamol to patients with severe renal or severe hepatic impairment. The hazards of overdose are greater in those with non-cirrhotic alcoholic liver disease. Chronic alcohol users should consult a doctor before use.

Cases of high anion gap metabolic acidosis (HAGMA) due to pyroglutamic acidosis have been reported in patients with severe illness such as severe renal impairment and sepsis, or in patients with malnutrition or other sources of glutathione deficiency (e.g. chronic alcoholism), who were treated with paracetamol at therapeutic dose for a prolonged period or a combination of paracetamol and flucloxacillin. If HAGMA due to pyroglutamic acidosis is suspected, prompt discontinuation of paracetamol and close monitoring, is recommended. The measurement of urinary 5-oxoproline may be useful to

identify pyroglutamic acidosis as underlying cause of HAGMA in patients with multiple risk factors.

Calpol Six Plus Sugar Free Suspension should not be diluted; where a dilution of Calpol Six Plus Sugar Free Suspension is required, Calpol Infant suspension should be recommended.

Sorbitol and maltitol may cause gastrointestinal discomfort and have a mild laxative effect. Each 5 ml of this product contains 1.935 g sorbitol liquid and 2.04g of maltitol liquid.
Calorific values: 2.6 kcal/g sorbitol and 2.3 kcal/g maltitol.

Due to the presence of maltitol liquid (E965) and sorbitol liquid (E420), patients with rare hereditary problems of fructose intolerance should not take this medicine.

Propyl (E216) and Methyl (E218) parahydroxybenzoate may cause allergic reactions (possibly delayed).

This medicine contains less than 1 mmol sodium (23 mg) per 5ml, that is to say essentially ‘sodium-free’.

This medicine contains 20.92mg propylene glycol (E1520) in each 5ml dose, which is equivalent to 4.18mg/ml.

This medicine contains 0.05mg benzyl alcohol in each 5ml which is equivalent to 0.01mg/ml. Benzyl alcohol may cause allergic reactions. Ask your doctor or pharmacist for advice if you are pregnant or breastfeeding, or if you have a liver or kidney disease. This is because large amounts of benzyl alcohol can build-up in your body and may cause side effects (called "metabolic acidosis")

Patients should be informed about the signs of serious skin reactions and use of the drug should be discontinued at the first appearance of skin rash or any other sign of hypersensitivity.

Taking this product with other paracetamol-containing medicines could lead to overdose and should therefore be avoided.

<u>The label contains the following statements:</u>
Contains paracetamol.
Do not give anything else containing paracetamol while giving this medicine.
Do not give more medicine than the label tells you to. If your child does not get better, talk to your doctor.
For oral use only
Always use the syringe supplied with the pack.
Do not overfill the spoon. (Sachet only)
Always use the spoon supplied with the pack. (Sachet only)
Do not give more than 4 doses in any 24 hour period.
Leave at least 4 hours between doses.

Do not give this medicine to your child for more than 3 days without speaking to your doctor or pharmacist
As with all medicines, if your child is currently taking any other medicine consult your doctor or pharmacist before using this product.
Keep out of the sight and reach of children.
Do not store above 25°C. Store in the original package. (Bottle only)
Keep sachets in the original container (Sachet only).
Shake the bottle for at least 10 seconds before use. (Bottle only)
Massage contents of sachet before opening. (Sachet only)
Talk to a doctor at once if your child takes too much of this medicine, even if they seem well.

The leaflet shall contain the following statements:
Talk to a doctor at once if your child takes too much of this medicine, even if they seem well. This is because too much paracetamol can cause delayed, serious liver damage.

Very rare cases of serious skin reactions have been reported. Symptoms may include:
- Skin reddening
- Blisters
- Rash

If skin reactions occur or existing skin symptoms worsen, stop use and seek medical help right away.

4.5 Interaction with other medicinal products and other forms of interaction

Drugs which induce hepatic microsomal enzymes

Metabolism of paracetamol possibly accelerated by carbamazepine, fosphenytoin, phenytoin, phenobarbital, primidone (also isolated reports of hepatotoxicity).

The speed of absorption of paracetamol may be increased by metoclopramide or domperidone and absorption reduced by cholestyramine.

The anticoagulant effect of warfarin and other coumarins may be enhanced by prolonged regular use of paracetamol with increased risk of bleeding; occasional doses have no significant effect.

Caution should be taken when paracetamol is used concomitantly with flucloxacillin as concurrent intake has been associated with high anion gap metabolic acidosis due to pyroglutamic acidosis, especially in patients with risks factors (see section 4.4).

Chronic alcohol intake can increase the hepatotoxicity of paracetamol overdose and may have contributed to the acute pancreatitis reported in one patient who had taken an overdose of paracetamol. Acute alcohol intake may

diminish an individual's ability to metabolise large doses of paracetamol, the plasma half-life of which can be prolonged.

4.6 Fertility, pregnancy and lactation

Pregnancy

A large amount of data on pregnant women indicate neither malformative, nor feto/neonatal toxicity. Epidemiological studies on neurodevelopment in children exposed to paracetamol in utero show inconclusive results. If clinically needed, paracetamol can be used during pregnancy however it should be used at the lowest effective dose for the shortest possible time and at the lowest possible frequency.

When given to the mother in therapeutic doses (1 g single dose), paracetamol crosses the placenta into foetal circulation as early as 30 minutes after ingestion and is metabolised in the foetus by conjugation with sulfate and increasingly with glutathione.

Breast-feeding

Paracetamol is excreted in breast milk but not in a clinically significant amount. Available published data do not contraindicate breast feeding.

Fertility

There is no information relating to the effects of this medicine on fertility.

4.7 Effects on ability to drive and use machines

None known.

4.8 Undesirable effects

Adverse drug reactions (ADRs) identified during clinical trials and post-marketing experience with paracetamol are listed below by System Organ Class (SOC). The frequencies are defined according to the following convention:

Very common	≥1/10
Common	≥1/100 and < 1/10
Uncommon	≥1/1,000 and <1/100
Rare	≥1/10,000 and <1/1,000
Very rare	<1/10,000
Not known	(cannot be estimated from the available data)

ADRs are presented by frequency category based on 1) incidence in adequately designed clinical trials or epidemiology studies, if available, or 2) when incidence is unavailable, frequency category is listed as 'Not known'.

System Organ Class (SOC)	Frequency	Adverse Drug Reaction (Preferred Term)
Blood and lymphatic system disorders	Not known	Blood disorder (including thrombocytopenia and agranulocytosis)[1]
Immune system disorders	Very rare	Anaphylactic reaction
	Very rare	Hypersensitivity
Hepatobiliary disorders	Not known	Liver injury[2]
Skin and subcutaneous tissue disorders	Very rare	Rash
	Not known	Fixed eruption
	Not known	Rash pruritic
	Not known	Urticaria
Renal and urinary disorders	Uncommon	Nephropathy toxic
	Not known	Renal papillary necrosis[3]
Investigations	Not known	Transaminases increased[4]
Metabolism and nutrition disorders	Not known	High anion gap metabolic acidosis

[1] Reported following paracetamol use, but not necessarily causally related to the drug

[2] Chronic hepatic necrosis has been reported in a patient who took daily therapeutic doses of paracetamol for about a year

[3] Reported after prolonged administration

[4] Low level transaminase elevations may occur in some patients taking therapeutic doses of paracetamol; these elevations are not accompanied with liver failure and usually resolve with continued therapy or discontinuation of paracetamol.

Very rare cases of serious skin reactions have been reported.

Chronic hepatic necrosis has been reported in a patient who took daily therapeutic doses of paracetamol for about a year and liver damage has been reported after daily ingestion of excessive amounts for shorter periods. A review of a group of patients with chronic active hepatitis failed to reveal differences in the abnormalities of liver function in those who were long-term users of paracetamol nor was the control of the disease improved after paracetamol withdrawal.

High anion gap metabolic acidosis.
Cases of high anion gap metabolic acidosis due to pyroglutamic acidosis have been observed in patients with risk factors using paracetamol (see section 4.4). Pyroglutamic acidosis may occur as a consequence of low glutathione levels in these patients.

Reporting of suspected adverse reactions
Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the Yellow Card Scheme at: *www.mhra.gov.uk/yellowcard* or search for MHRA Yellow Card in the Google Play or Apple App Store.

4.9 Overdose

Liver damage is possible in adults and adolescents (≥12 years of age) who have taken 7.5g or more of paracetamol. It is considered that excess quantities of a toxic metabolite (usually adequately detoxified by glutathione when normal doses of paracetamol are ingested) become irreversibly bound to liver tissue. Ingestion of 5g or more of paracetamol may lead to liver damage if the patient has risk factors (see below).

Risk Factors:

If the patient

- Is on long term treatment with carbamazepine, phenobarbitone, phenytoin, primidone, rifampicin, St John's Wort or other drugs that induce liver enzymes.

Or

- Regularly consumes ethanol in excess of recommended amounts.

Or

- Is likely to be glutathione deplete e.g. eating disorders, cystic fibrosis, HIV infection, starvation, cachexia.

Symptoms

Symptoms of paracetamol overdosage in the first 24 hours are pallor, nausea, hyperhidrosis, malaise, vomiting, anorexia and abdominal pain. Liver damage may become apparent 12 to 48 hours after ingestion.
This may include hepatomegaly, liver tenderness, jaundice, acute hepatic failure and hepatic necrosis. Abnormalities of glucose metabolism and metabolic acidosis may occur. Blood bilirubin, hepatic enzymes, INR, prothrombin time, blood phosphate and blood lactate may be increased. In severe poisoning, hepatic failure may progress to encephalopathy, haemorrhage, hypoglycaemia, cerebral oedema and death. Acute renal failure with acute tubular necrosis, strongly suggested by loin pain, haematuria and proteinuria, may develop even in the absence of severe liver damage. Cardiac arrhythmias and pancreatitis have been reported.

Haemolytic anaemia (in patients with glucose-6-phosphate dehydrogenase [G6PD] deficiency): Haemolysis has been reported in patients with G6PD deficiency, with use of paracetamol in overdose.

Management

Immediate treatment is essential in the management of paracetamol overdose. Despite a lack of significant early symptoms, patients should be referred to hospital urgently for immediate attention. Symptoms may be limited to nausea or vomiting and may not reflect the severity of overdose or the risk of organ damage. Management should be in accordance with established treatment guidelines, see BNF overdose section.

Treatment with activated charcoal should be considered if the overdose has been taken within 1 hour. Plasma paracetamol concentration should be measured at 4 hours or later after ingestion (earlier concentrations are unreliable). Treatment with N-acetylcysteine may be used up to 24 hours after ingestion of paracetamol, however, the maximum protective effect is obtained up to 8 hours post-ingestion. The effectiveness of the antidote declines sharply after this time. If required the patient should be given intravenous N-acetylcysteine, in line with the established dosage schedule. If vomiting is not a problem, oral methionine may be a suitable alternative for remote areas, outside hospital. Management of patients who present with serious hepatic dysfunction beyond 24h from ingestion should be discussed with the NPIS or a liver unit.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Other Analgesics and Antipyretics (Anilides)

ATC Code: N02 BE01

Paracetamol has analgesic and antipyretic effects similar to those of aspirin and is useful in the treatment of mild to moderate pain. It has weak anti-inflammatory effects.

5.2 Pharmacokinetic properties

Paracetamol is rapidly and almost completely absorbed from the gastrointestinal tract. Peak plasma concentrations are reached 30-90 minutes post dose and the plasma half-life is in the range of 1 to 3 hours after therapeutic doses. Drug is widely distributed throughout most body fluids. Following therapeutic doses 90-100% of the drug is recovered in the urine within 24 hours almost entirely following hepatic conjugation with glucuronic acid (about 60%), sulphuric acid (about 35%) or cysteine (about 3%). Small amounts of hydroxylated and deacetylated metabolites have also been detected. Children have less capacity for glucuronidation of the drug than do adults. In overdosage there is increased N-hydroxylation followed by glutathione conjugation. When the latter is exhausted, reaction with hepatic proteins is increased leading to necrosis.

5.3 Pre-clinical safety Data

Preclinical data reveal no special hazard for humans based on conventional studies of single and repeated dose toxicity, genotoxicity, and carcinogenicity.

Conventional studies using the currently accepted standards for the evaluation of toxicity to reproduction and development are not available..

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Maltitol Liquid (E965)
Sorbitol Liquid (70% non crystallising) (E420)
Glycerol
Microcrystalline cellulose and carmellose sodium
Xanthan gum
Methyl parahydroxybenzoate (E218)
Propyl parahydroxybenzoate (E216)
Acesulfame potassium
Polysorbate 80
Saccharin Sodium
Strawberry flavour 500286E (containing propylene glycol (E1520) and benzyl alcohol)
Strawberry Cream 11407-33 (containing propylene glycol (E1520))
Purified water

6.2 Incompatibilities

None known

6.3 Shelf life

3years for the bottles.
3years for the sachets.

6.4 Special precautions for storage

Do not store above 25°C. Store in the original package.

6.5 Nature and contents of container

12 x 5 ml aluminium foil/polyethylene laminate sachets.

Or

Amber glass bottle closed with a two-piece plastic child resistant, tamper evident closure fitted with a polyethylene or polvinylidine chloride (PVDC) laminate faced wad

Or

Amber glass bottle with a two-piece white plastic child-resistant external cap (in polypropylene), fitted with an inner plastic cap, including a tamper evident ring, in high density polyethylene (HDPE). The cap contains a plug made of Low Density Polyethylene (LDPE).

Or

Amber glass bottle closed with a plastic screw closure or metal roll-on pilfer proof closure fitted with a polyethylene or polyvinylidene chloride (PVDC) laminate faced wad.

Or
Amber glass bottle with a two-piece white plastic child-resistant external cap (in polypropylene), fitted with an inner plastic cap, including a tamper evident ring, in high density polyethylene (HDPE). A HDPE disk platine and a Press-In-Bottle Adapter (PIBA, commonly named plug), made of Low-Density Polyethylene (LDPE).

Pack sizes: 70 ml, 100 ml, 140 ml, 200 ml, 500 ml and 1000 ml. A syringe with a 2.5 ml and 5ml measure is supplied with this pack. (Bottle only) A spoon with a 2.5ml and 5ml measure is supplied with this pack. (Sachet only) Not all pack sizes may be marketed.

6.6 **Special precautions for disposal**

No special requirements for disposal.

Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

7 Marketing Authorisation Holder

McNeil Products Limited
50 – 100 Holmers Farm Way
High Wycombe
Buckinghamshire
HP12 4EG
UK

8 Marketing authorisation number

PL 15513/0003

9 **Date of first authorisation/renewal of the authorisation**

28.04.97 / 05/March/2009

10 **Date of revision of the text**

20 March 2025

SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

Calpol Six Plus Suspension Sugar Free

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Calpol Six Plus Suspension Sugar Free contains 250 mg Paracetamol in each 5 ml.

Excipients: maltitol liquid ((E965) contains 2.04 g of maltitol liquid per 5 ml), sodium (contains 1.18mg per 5ml), benzyl alcohol, propylene glycol (E1520), sorbitol liquid ((E420 contains 1.935 g sorbitol liquid per 5ml)), glycerol, methyl parahydroxybenzoate (E218) and propyl parahydroxybenzoate (E216). See section 4.4 for further information.

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Oral Suspension.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

Calpol Six Plus Suspension Sugar Free is indicated for the treatment of mild to moderate pain and as an antipyretic. It can be used in many conditions including headache, toothache, earache, sore throat, colds and influenza, aches and pains and post-immunisation fever.

4.2 Posology and Method of Administration

4.2.1 Posology

Children aged 6 to 12 years:

Child's Age	How Much	How often (in 24 hours)*
Under 6 years	Not recommended	N/A
6 – 8 years	5 ml	4 times

8 – 10 years	7.5 ml (5ml + 2.5 ml)	4 times
10 – 12 years	10 ml (5ml + 5ml)	4 times
• Do not give more than 4 doses in any 24 hour period • Leave at least 4 hours between doses • Do not give this medicine to your child for more than 3 days without speaking to your doctor or pharmacist		

Children aged 12-16 years: 10 – 15 ml (Two to three 5 ml doses) up to 4 times a day

Adults and children over 16 years: 10 – 20 ml (Two to four 5 ml doses) up to 4 times a day.

It is important to **shake the bottle** for at least 10 seconds before use.

The Elderly:

In the elderly, the rate and extent of paracetamol absorption is normal but plasma half-life is longer and paracetamol clearance is lower than in young adults.

4.3 Contra-indications

Hypersensitivity to paracetamol or to any of the excipients listed in section 6.1.

4.4 Special warnings and precautions for use

Do not exceed the recommended dose. Taking more than the recommended dose (overdose) may cause liver damage. In case of overdose, get medical help straight away. Quick medical attention is critical for adults as well as children even if signs or symptoms are not noticed.

Care is advised in the administration of paracetamol to patients with severe renal or severe hepatic impairment. The hazards of overdose are greater in those with non-cirrhotic alcoholic liver disease. Chronic alcohol users should consult a doctor before use.

Cases of high anion gap metabolic acidosis (HAGMA) due to pyroglutamic acidosis have been reported in patients with severe illness such as severe renal impairment and sepsis, or in patients with malnutrition or other sources of glutathione deficiency (e.g. chronic alcoholism), who were treated with paracetamol at therapeutic dose for a prolonged period or a combination of paracetamol and flucloxacillin. If HAGMA due to pyroglutamic acidosis is suspected, prompt discontinuation of paracetamol and close monitoring, is recommended. The measurement of urinary 5-oxoproline may be useful to identify pyroglutamic acidosis as underlying cause of HAGMA in patients with multiple risk factors.

Calpol Six Plus Suspension Sugar Free should not be diluted; where a dilution of Calpol Six Plus Suspension Sugar Free is required, Calpol Infant suspension should be recommended.

Sorbitol and maltitol may cause gastrointestinal discomfort and have a mild laxative effect. Each 5 ml of this product contains 1.935 g sorbitol liquid and 2.04g of maltitol liquid.
Calorific values: 2.6 kcal/g sorbitol and 2.3 kcal/g maltitol.

Due to the presence of maltitol liquid (E965) and sorbitol liquid (E420), patients with rare hereditary problems of fructose intolerance should not take this medicine.

Propyl (E216) and Methyl (E218) parahydroxybenzoate may cause allergic reactions (possibly delayed).

This medicine contains less than 1 mmol sodium (23 mg) per 5ml, that is to say essentially 'sodium-free'.

This medicine contains 20.92mg propylene glycol (E1520) in each 5ml dose, which is equivalent to 4.18mg/ml.

This medicine contains 0.05mg benzyl alcohol in each 5ml which is equivalent to 0.01mg/ml. Benzyl alcohol may cause allergic reactions. Ask your doctor or pharmacist for advice if you are pregnant or breastfeeding, or if you have a liver or kidney disease. This is because large amounts of benzyl alcohol can build-up in your body and may cause side effects (called "metabolic acidosis")

Patients should be informed about the signs of serious skin reactions and use of the drug should be discontinued at the first appearance of skin rash or any other sign of hypersensitivity.

Taking this product with other paracetamol-containing medicines could lead to overdose and should therefore be avoided.

<u>The label contains the following statements:</u>
Contains paracetamol.
Do not give anything else containing paracetamol while giving this medicine.
Do not give more medicine than the label tells you to. If your child does not get better, talk to your doctor.
For oral use only.
Always use the syringe supplied with the pack.
Do not give more than 4 doses in any 24 hour period.
Leave at least 4 hours between doses.
Do not give this medicine to your child for more than 3 days without speaking to your doctor or pharmacist.
As with all medicines, if your child is currently taking any other medicine consult your doctor or pharmacist before using this product.
Keep out of the sight and reach of children.
Do not store above 25°C. Store in the original package.

Shake the bottle for at least 10 seconds before use.
Talk to a doctor at once if your child takes too much of this medicine, even if they seem well.

The leaflet contains the following statements:
Talk to a doctor at once if your child takes too much of this medicine, even if they seem well. This is because too much paracetamol can cause delayed, serious liver damage.
If the child needs more than the doses shown in the table, or if fever doesn't go away, speak to your doctor as soon as possible.

Very rare cases of serious skin reactions have been reported. Symptoms may include:
- Skin reddening
- Blisters
- Rash

If skin reactions occur or existing skin symptoms worsen, stop use and seek medical help right away.

4.5 Interaction with other medicinal products and other forms of interaction

Drugs which induce hepatic microsomal enzymes

Metabolism of paracetamol possibly accelerated by carbamazepine, fosphenytoin, phenytoin, phenobarbital, primidone (also isolated reports of hepatotoxicity).

The speed of absorption of paracetamol may be increased by metoclopramide or domperidone and absorption reduced by cholestyramine.

The anticoagulant effect of warfarin and other coumarins may be enhanced by prolonged regular use of paracetamol with increased risk of bleeding; occasional doses have no significant effect.

Caution should be taken when paracetamol is used concomitantly with flucloxacillin as concurrent intake has been associated with high anion gap metabolic acidosis due to pyroglutamic acidosis, especially in patients with risks factors (see section 4.4).

Chronic alcohol intake can increase the hepatotoxicity of paracetamol overdose and may have contributed to the acute pancreatitis reported in one patient who had taken an overdose of paracetamol. Acute alcohol intake may diminish an individual's ability to metabolise large doses of paracetamol, the plasma half-life of which can be prolonged.

4.6 Fertility, pregnancy and lactation

Pregnancy

A large amount of data on pregnant women indicate neither malformative, nor feto/neonatal toxicity. Epidemiological studies on neurodevelopment in children exposed to paracetamol in utero show inconclusive results. If clinically needed, paracetamol can be used during pregnancy however it should be used at the lowest effective dose for the shortest possible time and at the lowest possible frequency.

When given to the mother in therapeutic doses (1 g single dose), paracetamol crosses the placenta into foetal circulation as early as 30 minutes after ingestion and is metabolised in the foetus by conjugation with sulfate and increasingly with glutathione.

Breast-feeding
Paracetamol is excreted in breast milk but not in a clinically significant amount. Available published data do not contraindicate breast feeding.

Fertility
There is no information relating to the effects of this medicine on fertility.

4.7 Effects on ability to drive and use machines

None known.

4.8 Undesirable effects

Adverse drug reactions (ADRs) identified during clinical trials and post-marketing experience with paracetamol are listed below by System Organ Class (SOC). The frequencies are defined according to the following convention:

Very common	≥1/10
Common	≥1/100 and < 1/10
Uncommon	≥1/1,000 and <1/100
Rare	≥1/10,000 and <1/1,000
Very rare	<1/10,000
Not known	(cannot be estimated from the available data)

ADRs are presented by frequency category based on 1) incidence in adequately designed clinical trials or epidemiology studies, if available, or 2) when incidence is unavailable, frequency category is listed as 'Not known'.

System Organ Class (SOC)	Frequency	Adverse Drug Reaction (Preferred Term)
Blood and lymphatic system disorders	Not known	Blood disorder (including thrombocytopenia and agranulocytosis)[1]
Immune system disorders	Very rare	Anaphylactic reaction
	Very rare	Hypersensitivity
Hepatobiliary disorders	Not known	Liver injury[2]

Skin and subcutaneous tissue disorders	Very rare	Rash
	Not known	Fixed eruption
	Not known	Rash pruritic
	Not known	Urticaria
Renal and urinary disorders	Uncommon	Nephropathy toxic
	Not known	Renal papillary necrosis[3]
Investigations	Not known	Transaminases increased[4]
Metabolism and nutrition disorders	Not known	High anion gap metabolic acidosis

[1] Reported following paracetamol use, but not necessarily causally related to the drug

[2] Chronic hepatic necrosis has been reported in a patient who took daily therapeutic doses of paracetamol for about a year

[3] Reported after prolonged administration

[4] Low level transaminase elevations may occur in some patients taking therapeutic doses of paracetamol; these elevations are not accompanied with liver failure and usually resolve with continued therapy or discontinuation of paracetamol.

Very rare cases of serious skin reactions have been reported.

Chronic hepatic necrosis has been reported in a patient who took daily therapeutic doses of paracetamol for about a year and liver damage has been reported after daily ingestion of excessive amounts for shorter periods. A review of a group of patients with chronic active hepatitis failed to reveal differences in the abnormalities of liver function in those who were long-term users of paracetamol nor was the control of the disease improved after paracetamol withdrawal.

High anion gap metabolic acidosis.
Cases of high anion gap metabolic acidosis due to pyroglutamic acidosis have been observed in patients with risk factors using paracetamol (see section 4.4). Pyroglutamic acidosis may occur as a consequence of low glutathione levels in these patients.

Reporting of suspected adverse reactions
Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the Yellow Card Scheme at: *www.mhra.gov.uk/yellowcard* or search for MHRA Yellow Card in the Google Play or Apple App Store.

4.9 Overdose

Liver damage is possible in adults and adolescents (≥12 years of age) who have taken 7.5g or more of paracetamol. It is considered that excess quantities of a toxic metabolite (usually adequately detoxified by glutathione when normal doses of paracetamol are ingested) become irreversibly bound to liver tissue. Ingestion of 5g or more of paracetamol may lead to liver damage if the patient has risk factors (see below).

Risk Factors:

If the patient

- Is on long term treatment with carbamazepine, phenobarbitone, phenytoin, primidone, rifampicin, St John's Wort or other drugs that induce liver enzymes.

Or

- Regularly consumes ethanol in excess of recommended amounts.

Or

- Is likely to be glutathione deplete e.g. eating disorders, cystic fibrosis, HIV infection, starvation, cachexia.

Symptoms

Symptoms of paracetamol overdosage in the first 24 hours are pallor, nausea, hyperhidrosis, malaise, vomiting, anorexia and abdominal pain. Liver damage may become apparent 12 to 48 hours after ingestion. This may include hepatomegaly, liver tenderness, jaundice, acute hepatic failure and hepatic necrosis, Abnormalities of glucose metabolism and metabolic acidosis may occur. Blood bilirubin, hepatic enzymes, INR, prothrombin time, blood phosphate and blood lactate may be increased. In severe poisoning, hepatic failure may progress to encephalopathy, haemorrhage, hypoglycaemia, cerebral oedema and death. Acute renal failure with acute tubular necrosis, strongly suggested by loin pain, haematuria and proteinuria, may develop even in the absence of severe liver damage. Cardiac arrhythmias and pancreatitis have been reported.

Haemolytic anaemia (in patients with glucose-6-phosphate dehydrogenase [G6PD] deficiency): Haemolysis has been reported in patients with G6PD deficiency, with use of paracetamol in overdose.

Management

Immediate treatment is essential in the management of paracetamol overdose. Despite a lack of significant early symptoms, patients should be referred to hospital urgently for immediate attention. Symptoms may be limited to nausea or vomiting and may not reflect the severity of overdose or the risk of organ damage. Management should be in accordance with established treatment guidelines, see BNF overdose section.

Treatment with activated charcoal should be considered if the overdose has been taken within 1 hour. Plasma paracetamol concentration should be

measured at 4 hours or later after ingestion (earlier concentrations are unreliable). Treatment with N-acetylcysteine may be used up to 24 hours after ingestion of paracetamol, however, the maximum protective effect is obtained up to 8 hours post-ingestion. The effectiveness of the antidote declines sharply after this time. If required the patient should be given intravenous N-acetylcysteine, in line with the established dosage schedule. If vomiting is not a problem, oral methionine may be a suitable alternative for remote areas, outside hospital. Management of patients who present with serious hepatic dysfunction beyond 24h from ingestion should be discussed with the NPIS or a liver unit.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Other Analgesics and Antipyretics (Anilides)

ATC Code: N02 BE01

Paracetamol has analgesic and antipyretic effects similar to those of aspirin and is useful in the treatment of mild to moderate pain. It has weak anti-inflammatory effects.

5.2 Pharmacokinetic properties

Paracetamol is rapidly and almost completely absorbed from the gastrointestinal tract. Peak plasma concentrations are reached 30-90 minutes post dose and the plasma half-life is in the range of 1 to 3 hours after therapeutic doses. Drug is widely distributed throughout most body fluids. Following therapeutic doses 90-100% of the drug is recovered in the urine within 24 hours almost entirely following hepatic conjugation with glucuronic acid (about 60%), sulphuric acid (about 35%) or cysteine (about 3%). Small amounts of hydroxylated and deacetylated metabolites have also been detected. Children have less capacity for glucuronidation of the drug than do adults. In overdosage there is increased N-hydroxylation followed by glutathione conjugation. When the latter is exhausted, reaction with hepatic proteins is increased leading to necrosis.

5.3 Pre-clinical safety Data

Preclinical data reveal no special hazard for humans based on conventional studies of single and repeated dose toxicity, genotoxicity, and carcinogenicity.

Conventional studies using the currently accepted standards for the evaluation of toxicity to reproduction and development are not available.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Maltitol Liquid (E965)
Sorbitol Liquid (70% non crystallising) (E420)
Glycerol
Microcrystalline cellulose and carmellose sodium
Xanthan gum
Methyl parahydroxybenzoate (E218)
Propyl parahydroxybenzoate (E216)
Acesulfame potassium
Polysorbate 80
Saccharin Sodium
Strawberry flavour 500286E (containing propylene glycol (E1520) and benzyl alcohol)
Strawberry Cream 11407-33 (containing propylene glycol (E1520))
Purified water

6.2 Incompatibilities

None known

6.3 Shelf life

3 years

6.4 Special precautions for storage

Do not store above 25°C. Store in the original package.

6.5 Nature and contents of container

Amber glass bottle closed with a two-piece plastic child resistant, tamper evident closure fitted with a polyethylene or polyvinylidene chloride (PVDC) laminate faced wad.

or

Amber glass bottle with a two-piece white plastic child-resistant external cap (in polypropylene), fitted with an inner plastic cap, including a tamper evident ring, in high density polyethylene (HDPE). The cap contains a plug made of Low Density Polyethylene (LDPE).

Or
Amber glass bottle with a two-piece white plastic child-resistant external cap (in polypropylene), fitted with an inner plastic cap, including a tamper evident ring, in high density polyethylene (HDPE). A HDPE disk platine and a Press-In-Bottle Adapter (PIBA, commonly named plug), made of Low-Density Polyethylene (LDPE).

Pack size: 80 ml. A syringe with a 2.5 ml and 5ml measure is supplied with this product.

6.6 Special instructions for disposal

No special requirements for disposal.

7 Marketing Authorisation Holder

McNeil Products Limited
1 Station Hill Square
Station Hill
Reading
RG1 1LN
UK

8 Marketing authorisation number

PL 15513/0164

9 Date of first authorisation/renewal of the authorisation

29 October 2008

10 Date of revision of the text

28 September 2026

SUMMARY OF PRODUCT CHARACTERISTICS

1. Name of the Medicinal Product

Calpol Six Plus Fastmelts (250 mg Orodispersible Tablets)

2. Qualitative and Quantitative Composition

Paracetamol 250 mg
Excipients: also contains mannitol (E421), aspartame ((E951) contains 8mg aspartame per tablet), benzyl alcohol and glucose.
For the full list of excipients, see section 6.1.

3. Pharmaceutical Form

Orodispersible tablet

Round, white, bi-convex tablets with central concave depression.

4. Clinical Particulars

4.1 Therapeutic Indications

Calpol Six Plus Fastmelts is indicated for the treatment of mild to moderate pain and as an antipyretic. It can be used in many conditions including headache, toothache, earache, sore throat, colds and influenza, aches and pains and post-immunisation fever.

4.2 Posology and Method of Administration

Oral:
Tablets should be placed in the mouth where they melt on the tongue. The tablet will rapidly disperse to a pleasant tasting paste that can be easily ingested. Alternatively the tablet can be dispersed in a teaspoonful of water or milk.

Adults and children

Child's Age	How Much	How often (in 24 hours)
Under 6 years	**Not recommended**	N/A
6 - 9 years	1 tablet	4 times
9 - 12 years	2 tablets	4 times
12 – 16 years	2 to 3 tablets	4 times
Adults and children over 16 years	2 to 4 tablets	4 times
• Do not give more than 4 doses in any 24 hour period • Leave at least 4 hours between doses • Do not give this medicine to your child for more than 3 days without speaking to your doctor or pharmacist		

Use in the Elderly
Normal adult dosage is appropriate. However, a reduction in dosing may be necessary in frail, elderly subjects (see Section 5.2).

4.3 Contraindications

Hypersensitivity to paracetamol or to any of the excipients listed in section 6.1.

4.4 Special Warnings and Precautions for Use

Do not exceed the recommended dose. Taking more than the recommended dose (overdose) may cause liver damage. In case of overdose, get medical help straight away. Quick medical attention is critical for adults as well as children even if signs or symptoms are not noticed.

Care is advised in the administration of paracetamol to patients with severe renal or severe hepatic impairment.
The hazards of overdose are greater in those with non-cirrhotic alcoholic liver disease. Chronic alcohol users should consult a doctor before use.

Cases of high anion gap metabolic acidosis (HAGMA) due to pyroglutamic acidosis have been reported in patients with severe illness such as severe renal impairment and sepsis, or in patients with malnutrition or other sources of glutathione deficiency (e.g. chronic alcoholism), who were treated with paracetamol at therapeutic dose for a prolonged period or a combination of

paracetamol and flucloxacillin. If HAGMA due to pyroglutamic acidosis is suspected, prompt discontinuation of paracetamol and close monitoring, is recommended. The measurement of urinary 5-oxoproline may be useful to identify pyroglutamic acidosis as underlying cause of HAGMA in patients with multiple risk factors.

Calpol Six Plus Fastmelts contains 8mg aspartame which is a source of phenylalanine equivalent to 0.04 mg/250 mg tablet. The phenylalanine in the tablets may be harmful to people with phenylketonuria (PKU), a rare genetic disorder in which phenylalanine builds up because the body cannot remove it properly.

Calpol Six Plus Fastmelts contain mannitol which may have a mild laxative effect.

This medicine contains 0.0011g of glucose in each tablet. Patients with rare glucose-galactose malabsorption should not take this medicine.

This medicine contains 0.00064mg benzyl alcohol in each tablet. Benzyl alcohol may cause allergic reactions. Ask your doctor or pharmacist for advice if you are pregnant or breastfeeding, or if you have a liver or kidney disease. This is because large amounts of benzyl alcohol can build-up in your body and may cause side effects (called "metabolic acidosis")."

Patients should be informed about the signs of serious skin reactions and use of the drug should be discontinued at the first appearance of skin rash or any other sign of hypersensitivity.

Taking this product with other paracetamol-containing medicines could lead to overdose and should therefore be avoided.

<u>The label contains the following statements:</u>
Contains paracetamol.
Do not give anything else containing paracetamol while giving this medicine.
Do not give more medicine than the label tells you to. If your child does not get better, talk to your doctor.
For oral use only.
Do not give more than 4 doses in any 24 hour period.
Leave at least 4 hours between doses.
Do not give this medicine to your child for more than 3 days without speaking to your doctor or pharmacist.
As with all medicines, if your child is currently taking any other medicine consult your doctor or pharmacist before using this product.
Keep out of the sight and reach of children.
Talk to a doctor at once if your child takes too much of this medicine, even if they seem well.

The leaflet contains the following statements:
Talk to a doctor at once if your child takes too much of this medicine, even if they seem well. This is because too much paracetamol can cause delayed, serious liver damage.

Very rare cases of serious skin reactions have been reported. Symptoms may include:
- Skin reddening
- Blisters
- Rash

If skin reactions occur or existing skin symptoms worsen, stop use and seek medical help right away.

4.5 Interactions with other Medicinal Products and other forms of Interaction

Drugs which induce hepatic microsomal enzymes
Metabolism of paracetamol possibly accelerated by carbamazepine, fosphenytoin, phenytoin, phenobarbital, primidone (also isolated reports of hepatotoxicity).

The speed of absorption of paracetamol may be increased by metoclopramide or domperidone and absorption reduced by cholestyramine.

The anticoagulant effect of warfarin and other coumarins may be enhanced by prolonged regular use of paracetamol with increased risk of bleeding; occasional doses have no significant effect.

Caution should be taken when paracetamol is used concomitantly with flucloxacillin as concurrent intake has been associated with high anion gap metabolic acidosis due to pyroglutamic acidosis, especially in patients with risks factors (see section 4.4).

Chronic alcohol intake can increase the hepatotoxicity of paracetamol overdose and may have contributed to the acute pancreatitis reported in one patient who had taken an overdose of paracetamol. Acute alcohol intake may diminish an individual's ability to metabolise large doses of paracetamol, the plasma half-life of which can be prolonged.

4.6 Fertility, pregnancy and Lactation

Pregnancy

A large amount of data on pregnant women indicate neither malformative, nor feto/neonatal toxicity. Epidemiological studies on neurodevelopment in children exposed to paracetamol in utero show inconclusive results. If clinically needed,

paracetamol can be used during pregnancy however it should be used at the lowest effective dose for the shortest possible time and at the lowest possible frequency.

When given to the mother in therapeutic doses (1 g single dose), paracetamol crosses the placenta into foetal circulation as early as 30 minutes after ingestion and is metabolised in the foetus by conjugation with sulfate and increasingly with glutathione.

Breast-feeding

Paracetamol is excreted in breast milk but not in a clinically significant amount. Available published data do not contraindicate breast-feeding.

Fertility

There is no information relating to the effects of this medicine on fertility.

4.7 Effects on ability to drive and use machines

None known

4.8 Undesirable effects

Adverse drug reactions (ADRs) identified during clinical trials and post-marketing experience with paracetamol are listed below by System Organ Class (SOC). The frequencies are defined according to the following convention:

Very common	≥1/10
Common	≥1/100 and < 1/10
Uncommon	≥1/1,000 and <1/100
Rare	≥1/10,000 and <1/1,000
Very rare	<1/10,000
Not known	(cannot be estimated from the available data)

ADRs are presented by frequency category based on 1) incidence in adequately designed clinical trials or epidemiology studies, if available, or 2) when incidence is unavailable, frequency category is listed as 'Not known'.

System Organ Class (SOC)	Frequency	Adverse Drug Reaction (Preferred Term)
Blood and lymphatic system disorders	Not known	Blood disorder (including thrombocytopenia and agranulocytosis)[1]
Immune system disorders	Very rare	Anaphylactic reactions
	Very rare	Hypersensitivity

Hepatobiliary disorders	Not known	Liver injury[2]
Skin and subcutaneous tissue disorders	Very rare	Rash
	Not Known	Fixed eruption
	Not known	Rash pruritic
	Not known	Urticaria
Renal and urinary disorders	Uncommon	Nephropathy toxic
	Not known	Renal papillary necrosis[3]
Investigations	Not known	Transaminases increased[4]
Metabolism and nutrition disorders	Not known	High anion gap metabolic acidosis

1. Reported following paracetamol use, but not necessarily causally related to the drug.
2. Chronic hepatic necrosis has been reported in a patient who took daily therapeutic doses of paracetamol for about a year.
3. Reported after prolonged administration.
4.Low level transaminase elevations may occur in some patients taking therapeutic doses of paracetamol; these elevations are not accompanied with liver failure and usually resolve with continued therapy or discontinuation of paracetamol.

Very rare cases of serious skin reactions have been reported.

Chronic hepatic necrosis has been reported in a patient who took daily therapeutic doses of paracetamol for about a year and liver damage has been reported after daily ingestion of excessive amounts for shorter periods. A review of a group of patients with chronic active hepatitis failed to reveal differences in the abnormalities of liver function in those who were long-term users of paracetamol nor was the control of their disease improved after paracetamol withdrawal.

High anion gap metabolic acidosis.
Cases of high anion gap metabolic acidosis due to pyroglutamic acidosis have been observed in patients with risk factors using paracetamol (see section 4.4). Pyroglutamic acidosis may occur as a consequence of low glutathione levels in these patients.

Reporting of suspected adverse reactions
Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the Yellow Card Scheme at: www.mhra.gov.uk/yellowcard or search for MHRA Yellow Card in the Google Play or Apple App Store.

4.9 Overdose

Liver damage is possible in adults and adolescents (≥12 years of age) who have taken 7.5g or more of paracetamol. It is considered that excess quantities of a toxic metabolite (usually adequately detoxified by glutathione when normal doses of paracetamol are ingested) become irreversibly bound to liver tissue. Ingestion of 5g or more of paracetamol may lead to liver damage if the patient has risk factors (see below)

Risk Factors:

If the patient

a) Is on long term treatment with carbamazepine, phenobarbitol, phenytoin, primidone, rifampicin, St John's Wort or other drugs that induce liver enzymes
Or
b) Regularly consumes ethanol in excess of recommended amounts
Or
c) Is likely to be glutathione deplete e.g, eating disorders, cystic fibrosis, HIV infection, starvation, cachexia

Symptoms

Symptoms of paracetamol overdosage in the first 24 hours are pallor, nausea, hyperhidrosis, malaise, vomiting, anorexia and abdominal pain. Liver damage may become apparent 12 to 48 hours after ingestion. This may include hepatomegaly, liver tenderness, jaundice, acute hepatic failure and hepatic necrosis. Abnormalities of glucose metabolism and metabolic acidosis may occur. Blood bilirubin, hepatic enzymes, INR, prothrombin time, blood phosphate and blood lactate may be increased. In severe poisoning, hepatic failure may progress to encephalopathy, haemorrhage, hypoglycaemia, cerebral oedema and death. Acute renal failure with acute tubular necrosis, strongly suggested by loin pain, haematuria and proteinuria, may develop even in the absence of severe liver damage. Cardiac arrhythmias and pancreatitis have been reported.

Haemolytic anaemia (in patients with glucose-6-phosphate dehydrogenase [G6PD] deficiency): Haemolysis has been reported in patients with G6PD deficiency, with use of paracetamol in overdose.

Management

Immediate treatment is essential in the management of paracetamol overdose. Despite a lack of significant early symptoms, patients should be referred to hospital urgently for immediate medical attention. Symptoms may be limited to nausea or vomiting and may not reflect the severity of the overdose or the risk of

organ damage. Management should be in accordance with established treatment guidelines, see BNF overdose section.

Treatment with activated charcoal should be considered if the overdose has been taken within 1 hour. Plasma paracetamol concentrations should be measured at 4 hours or later after ingestion (earlier concentrations are unreliable). Treatment with N-acetylcysteine may be used up to 24 hours after ingestion of paracetamol, however the maximum protective effect is obtained up to 8 hours post-ingestion. The effectiveness of the antidote declines sharply after this time. If required the patient should be given intravenous N-acetylcysteine, in line with the established dosage schedule. If vomiting is not a problem oral methionine may be a suitable alternative for remote areas, outside hospital. Management of patients who present with serious hepatic dysfunction beyond 24h from ingestion should be discussed with the NPIS or a liver unit.

5. Pharmacological Properties

5.1 Pharmacodynamic Properties

Pharmacotherapeutic group: Other Analgesics and Antipyretics (Anilides)

ATC Code: N02 BE01

Paracetamol has analgesic and antipyretic effects similar to those of aspirin and is useful in the treatment of mild to moderate pain.

5.2 Pharmacokinetic Properties

Paracetamol is rapidly and almost completely absorbed from the gastro-intestinal tract. Peak plasma concentrations are reached 30-90 minutes post dose.

Paracetamol is distributed rapidly throughout all tissues. Protein binding is low.

The plasma half-life is in the range of 1 to 4 hours after therapeutic doses.

Following therapeutic doses 90-100% of the drug is recovered in the urine within 24 hours almost entirely following hepatic conjugation with glucuronic acid (about 60%), sulphuric acid (about 35%) or cysteine (about 3%). Small amounts of hydroxylated and deacetylated metabolites have also been detected. Children have less capacity for glucuronidation of the drug than do adults. In overdose there is increased N-hydroxylation followed by glutathione conjugation. When the latter is exhausted reaction with hepatic proteins is increased leading to necrosis.

In the elderly, the rate and extent of paracetamol absorption is normal but plasma half-life is longer and paracetamol clearance is lower than in young adults.

5.3 Preclinical Safety Data

Preclinical data reveal no special hazard for humans based on conventional studies of single and repeated dose toxicity, genotoxicity, and carcinogenicity.

Conventional studies using the currently accepted standards for the evaluation of toxicity to reproduction and development are not available.

6. Pharmaceutical Particulars

6.1 List of Excipients

Mannitol (E421)
Crospovidone
Aspartame (E951)
Strawberry flavouring E. 9620941 (containing benzyl alcohol and glucose)
Magnesium stearate
Basic butylated methacrylate copolymer
Polyacrylate dispersion 30%
Colloidal Anhydrous Silica

6.2 Incompatibilities

Not applicable.

6.3 Shelf Life

3 years

6.4 Special Precautions for Storage

This medicinal product does not require any special storage conditions.

6.5 Nature and Contents of Container

Strip containing 12 tablets.
The blister consists of a blister complex (Polyamide/PVC/Aluminium) and either:
an aluminium sealing sheet
or
a paper/aluminium child resistant sealing sheet.

6.6 Special precautions for disposal

No special requirements for disposal.

7. Marketing Authorisation Holder

McNeil Products Limited
1 Station Hill Square
Station Hill
Reading
RG1 1LN
UK

8 Marketing Authorisation Number

PL 15513/0121

9. Date of First Authorisation/Renewal of the Authorisation

13th July 2005/ 11 March 2009

10. Date of Revision of the Text

31/07/2026

SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

Calpol Six Plus Fastmelts (250 mg Orodispersible Tablets)

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Paracetamol 250 mg
Excipients: also contains mannitol (E421), aspartame ((E951)) contains 8mg aspartame per tablet), benzyl alcohol and glucose.
For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Orodispersible tablet

Round, white, bi-convex tablets with central concave depression.

4. CLINICAL PARTICULARS

4.1. Therapeutic indications

Calpol Six Plus Fastmelts is indicated for the treatment of mild to moderate pain and as an antipyretic. It can be used in many conditions including headache, toothache, earache, sore throat, colds and influenza, aches and pains and post-immunisation fever.

4.2. Posology and method of administration

Oral:
Tablets should be placed in the mouth where they melt on the tongue. The tablet will rapidly disperse to a pleasant tasting paste that can be easily ingested. Alternatively the tablet can be dispersed in a teaspoonful of water or milk.

Adults and children

Child's Age	How Much	How often (in 24 hours)
Under 6 years	**Not recommended**	N/A
6 - 9 years	1 tablet	4 times
9 - 12 years	2 tablets	4 times
12 – 16 years	2 to 3 tablets	4 times
Adults and children over 16 years	2 to 4 tablets	4 times
• Do not give more than 4 doses in any 24 hour period • Leave at least 4 hours between doses • Do not give this medicine to your child for more than 3 days without speaking to your doctor or pharmacist		

Use in the Elderly
Normal adult dosage is appropriate. However, a reduction in dosing may be necessary in frail, elderly subjects (see Section 5.2).

4.3. Contraindications

Hypersensitivity to paracetamol or to any of the excipients listed in section 6.1.

4.4. Special warnings and precautions for use

Do not exceed the recommended dose. Taking more than the recommended dose (overdose) may cause liver damage. In case of overdose, get medical help straight away. Quick medical attention is critical for adults as well as children even if signs or symptoms are not noticed.

Care is advised in the administration of paracetamol to patients with severe renal or severe hepatic impairment. The hazards of overdose are greater in those with non-cirrhotic alcoholic liver disease. Chronic alcohol users should consult a doctor before use.

Cases of high anion gap metabolic acidosis (HAGMA) due to pyroglutamic acidosis have been reported in patients with severe illness such as severe renal impairment and sepsis, or in patients with malnutrition or other sources of glutathione deficiency (e.g. chronic alcoholism), who were treated with paracetamol at therapeutic dose for a prolonged period or a combination of

paracetamol and flucloxacillin. If HAGMA due to pyroglutamic acidosis is suspected, prompt discontinuation of paracetamol and close monitoring, is recommended. The measurement of urinary 5-oxoproline may be useful to identify pyroglutamic acidosis as underlying cause of HAGMA in patients with multiple risk factors.

Calpol Six Plus Fastmelts contains 8mg aspartame, which is a source of phenylalanine equivalent to 0.04 mg/250 mg tablet. The phenylalanine in the tablets may be harmful to people with phenylketonuria (PKU), a rare genetic disorder in which phenylalanine builds up because the body cannot remove it properly.

Calpol Six Plus Fastmelts contain mannitol, which may have a mild laxative effect.

This medicine contains 0.0011g of glucose in each tablet. Patients with rare glucose-galactose malabsorption should not take this medicine.

This medicine contains 0.00064mg benzyl alcohol in each tablet. Benzyl alcohol may cause allergic reactions. Ask your doctor or pharmacist for advice if you are pregnant or breastfeeding, or if you have a liver or kidney disease. This is because large amounts of benzyl alcohol can build-up in your body and may cause side effects (called "metabolic acidosis")."

Patients should be informed about the signs of serious skin reactions and use of the drug should be discontinued at the first appearance of skin rash or any other sign of hypersensitivity.

Taking this product with other paracetamol-containing medicines could lead to overdose and should therefore be avoided.

The label contains the following statements:

Contains paracetamol.
Do not give anything else containing paracetamol while giving this medicine.
Do not give more medicine than the label tells you to. If your child does not get better, talk to your doctor.
For oral use only
Do not give more than 4 doses in any 24 hour period.
Leave at least 4 hours between doses.
Do not give this medicine to your child for more than 3 days without speaking to your doctor or pharmacist
As with all medicines, if your child is currently taking any other medicine consult your doctor or pharmacist before using this product.
Keep out of the sight and reach of children.

Talk to a doctor at once if your child takes too much of this medicine, even if they seem well.

The leaflet contains the following statements:

Talk to a doctor at once if your child takes too much of this medicine, even if they seem well. This is because too much paracetamol can cause delayed, serious liver damage.

Very rare cases of serious skin reactions have been reported. Symptoms may include:
- Skin reddening
- Blisters
- Rash

If skin reactions occur or existing skin symptoms worsen, stop use and seek medical help right away.

4.5. Interactions with other medicinal products and other forms of interaction

Drugs which induce hepatic microsomal enzymes
Metabolism of paracetamol possibly accelerated by carbamazepine, fosphenytoin, phenytoin, phenobarbital, primidone (also isolated reports of hepatotoxicity).

The speed of absorption of paracetamol may be increased by metoclopramide or domperidone and absorption reduced by cholestyramine.

The anticoagulant effect of warfarin and other coumarins may be enhanced by prolonged regular use of paracetamol with increased risk of bleeding; occasional doses have no significant effect.

Caution should be taken when paracetamol is used concomitantly with flucloxacillin as concurrent intake has been associated with high anion gap metabolic acidosis due to pyroglutamic acidosis, especially in patients with risks factors (see section 4.4).

Chronic alcohol intake can increase the hepatotoxicity of paracetamol overdose and may have contributed to the acute pancreatitis reported in one patient who had taken an overdose of paracetamol. Acute alcohol intake may diminish an individual's ability to metabolise large doses of paracetamol, the plasma half-life of which can be prolonged.

4.6. Fertility, pregnancy and lactation

Pregnancy

A large amount of data on pregnant women indicate neither malformative, nor feto/neonatal toxicity. Epidemiological studies on neurodevelopment in children exposed to paracetamol in utero show inconclusive results. If clinically needed, paracetamol can be used during pregnancy however it should be used at the lowest effective dose for the shortest possible time and at the lowest possible frequency.

When given to the mother in therapeutic doses (1 g single dose), paracetamol crosses the placenta into foetal circulation as early as 30 minutes after ingestion and is metabolised in the foetus by conjugation with sulfate and increasingly with glutathione.

Breast-feeding
Paracetamol is excreted in breast milk but not in a clinically significant amount. Available published data do not contraindicate breast-feeding.

Fertility
There is no information relating to the effects of this medicine on fertility.

4.7. Effects on ability to drive and use machines

None known.

4.8. Undesirable effects

Adverse drug reactions (ADRs) identified during clinical trials and post-marketing experience with paracetamol are listed below by System Organ Class (SOC). The frequencies are defined according to the following convention:

Very common	≥1/10
Common	≥1/100 and < 1/10
Uncommon	≥1/1,000 and <1/100
Rare	≥1/10,000 and <1/1,000
Very rare	<1/10,000
Not known	(cannot be estimated from the available data)

ADRs are presented by frequency category based on 1) incidence in adequately designed clinical trials or epidemiology studies, if available, or 2) when incidence is unavailable, frequency category is listed as 'Not known'.

System Organ Class (SOC)	Frequency	Adverse Drug Reaction (Preferred Term)
Blood and lymphatic system disorders	Not known	Blood disorder-(including thrombocytopenia and agranulocytosis)[1]
Immune system disorders	Very rare	Anaphylactic reactions
	Very rare	Hypersensitivity

Hepatobiliary disorders	Not known	Liver injury[2]
Skin and subcutaneous tissue disorders	Very rare	Rash
	Not known	Fixed eruption
	Not known	Rash pruritic
	Not known	Urticaria
Renal and urinary disorders	Uncommon	Nephropathy toxic
	Not known	Renal papillary necrosis[3]
Investigations	Not known	Transaminases increased[4]
Metabolism and nutrition disorders	Not known	High anion gap metabolic acidosis

1. Reported following paracetamol use, but not necessarily causally related to the drug.
2. Chronic hepatic necrosis has been reported in a patient who took daily therapeutic doses of paracetamol for about a year.
3. Reported after prolonged administration.
4.Low level transaminase elevations may occur in some patients taking therapeutic doses of paracetamol; these elevations are not accompanied with liver failure and usually resolve with continued therapy or discontinuation of paracetamol.

Very rare cases of serious skin reactions have been reported.

Chronic hepatic necrosis has been reported in a patient who took daily therapeutic doses of paracetamol for about a year and liver damage has been reported after daily ingestion of excessive amounts for shorter periods. A review of a group of patients with chronic active hepatitis failed to reveal differences in the abnormalities of liver function in those who were long-term users of paracetamol nor was the control of their disease improved after paracetamol withdrawal.

High anion gap metabolic acidosis.
Cases of high anion gap metabolic acidosis due to pyroglutamic acidosis have been observed in patients with risk factors using paracetamol (see section 4.4). Pyroglutamic acidosis may occur as a consequence of low glutathione levels in these patients.

Reporting of suspected adverse reactions
Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the Yellow Card Scheme at: www.mhra.gov.uk/yellowcard or search for MHRA Yellow Card in the Google Play or Apple App Store.

4.9. Overdose

Liver damage is possible in adults and adolescents (≥12 years of age) who have taken 7.5g or more of paracetamol. It is considered that excess quantities of a toxic metabolite (usually adequately detoxified by glutathione when normal doses of paracetamol are ingested) become irreversibly bound to liver tissue. Ingestion of 5g or more of paracetamol may lead to liver damage if the patient has risk factors (see below).

Risk Factors:
If the patient

a)- Is on long term treatment with carbamezepine, Phenobarbital, phenytoin, primidone, rifampicin, St John's Wort or other drugs that induce liver enzymes.
Or
b)- Regularly consumes ethanol in excess of recommended amounts.
Or
c)- Is likely to be glutathione deplete e.g. eating disorders, cystic fibrosis, HIV infection, starvation, cachexia.

Symptoms
Symptoms of paracetamol overdose in the first 24 hours are pallor, nausea, hyperhidrosis, malaise, vomiting, anorexia and abdominal pain. Liver damage may become apparent 12 to 48 hours after ingestion. This may include hepatomegaly, liver tenderness, jaundice, acute hepatic failure and hepatic necrosis. Abnormalities of glucose metabolism and metabolic acidosis may occur. Blood bilirubin, hepatic enzymes, INR, prothrombin time, blood phosphate and blood lactate may be increased. In severe poisoning, hepatic failure may progress to encephalopathy, haemorrhage, hypoglycaemia, cerebral oedema and death. Acute renal failure with acute tubular necrosis, strongly suggested by loin pain, haematuria and proteinuria, may develop even in the absence of severe liver damage. Cardiac arrhythmias and pancreatitis have been reported.

Haemolytic anaemia (in patients with glucose-6-phosphate dehydrogenase [G6PD] deficiency): Haemolysis has been reported in patients with G6PD deficiency, with use of paracetamol in overdose.

Management
Immediate treatment is essential in the management of paracetamol overdose. Despite a lack of significant early symptoms, patients should be referred to hospital urgently for immediate medical attention. Symptoms may be limited to nausea or vomiting and may not reflect the severity of the overdose or the risk of organ damage. Management should be in accordance with established treatment guidelines, see BNF overdose section.

Treatment with activated charcoal should be considered if the overdose has been taken within 1 hour. Plasma paracetamol concentration should be measured at 4 hours or later after ingestion (earlier concentrations are unreliable). Treatment with N-acetylcysteine may be used up to 24 hours after ingestion of paracetamol, however, the maximum protective effect is obtained up to 8 hours post-ingestion. The effectiveness of the antidote declines sharply after this time. If required the patient should be given intravenous N-acetylcysteine, in line with the established dosage schedule. If vomiting is not a problem, oral methionine may be a suitable alternative for remote areas, outside hospital. Management of patients who present with serious hepatic dysfunction beyond 24h from ingestion should be discussed with the NPIS or a liver unit.

5. PHARMACOLOGICAL PROPERTIES

5.1. Pharmacodynamic properties

Pharmacotherapeutic group: Other Analgesics and Antipyretics (Anilides)

ATC Code: N02 BE01

Paracetamol has analgesic and antipyretic effects similar to those of aspirin and is useful in the treatment of mild to moderate pain.

5.2. Pharmacokinetic properties

Paracetamol is rapidly and almost completely absorbed from the gastro-intestinal tract. Peak plasma concentrations are reached 30-90 minutes post dose.

Paracetamol is distributed rapidly throughout all tissues. Protein binding is low.

The plasma half-life is in the range of 1 to 4 hours after therapeutic doses.

Following therapeutic doses 90-100% of the drug is recovered in the urine within 24 hours almost entirely following hepatic conjugation with glucuronic acid (about 60%), sulphuric acid (about 35%) or cysteine (about 3%). Small amounts of hydroxylated and deacetylated metabolites have also been detected. Children have less capacity for glucuronidation of the drug than do adults. In overdose there is increased N-hydroxylation followed by glutathione conjugation. When the latter is exhausted reaction with hepatic proteins is increased leading to necrosis.

In the elderly, the rate and extent of paracetamol absorption is normal but plasma half-life is longer and paracetamol clearance is lower than in young adults.

5.3. Preclinical safety data

Preclinical data reveal no special hazard for humans based on conventional studies of single and repeated dose toxicity, genotoxicity, and carcinogenicity.

Conventional studies using the currently accepted standards for the evaluation of toxicity to reproduction and development are not available.

6. PHARMACEUTICAL PARTICULARS

6.1. List of excipients

Mannitol (E421)
Crospovidone
Aspartame (E951)
Strawberry flavouring E. 9620941 (containing benzyl alcohol and glucose)
Magnesium stearate
Basic butylated methacrylate copolymer
Polyacrylate dispersion 30%
Colloidal anhydrous silica

6.2. Incompatibilities

Not applicable.

6.3. Shelf life

3 years

6.4. Special precautions for storage

This medicinal product does not require any special storage conditions.

6.5. Nature and contents of container

Strip containing 24 tablets.
The blister consists of a blister complex (Polyamide/PVC/Aluminium) and either:
an aluminium sealing sheet
or
a paper/aluminium child resistant sealing sheet.

6.6. Special precautions for disposal

No special requirements for disposal.

7. MARKETING AUTHORISATION HOLDER

McNeil Products Limited
1 Station Hill Square
Station Hill
Reading
RG1 1LN
UK

8. MARKETING AUTHORISATION NUMBER

PL 15513/0082

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

19th March 2001/03 March 2009

10. DATE OF REVISION OF THE TEXT

31/07/2026

SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

Calprofen 100mg/5ml Oral Suspension Ibuprofen

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Ibuprofen 100 mg/5 ml

Excipients with known effect
Also contains maltitol syrup (E965), sodium methylhydroxybenzoate (E219), sodium propylhydroxybenzoate (E217), propylene glycol (E1520), sodium (contains 1.86 mg per 5 ml) and ethanol.

For the full list of excipients, see section 6.1

3. PHARMACEUTICAL FORM

Oral Suspension
Sugar Free, Colour Free and Strawberry Flavour

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

Children aged 3 months to 12 years:
Mild to moderate pain, post-immunisation pyrexia, rheumatic or muscular pain, headache, reduction of fever, sore throat, teething pain, toothache, minor aches and pains, symptoms of cold and influenza.

4.2 Posology and method of administration

To be taken orally. For short term use only.

Children aged 3 months to 12 years:

Not recommended for children weighing less than 5 kg.

For pain and fever – 20mg/kg/day in divided doses.

Infants 3-6 months: 2.5 ml three times a day. Do not use for more than 24 hours.
Infants 6-12 months: 2.5 ml three times a day.

Children 1-2 years: 2.5 ml three to four times a day
Children 3-7 years: 5 ml three to four times a day
Children 8-12 years: 10 ml three to four times a day

Doses should be taken every 6 – 8 hours when required, and at least 4 hours should be left between doses.

Post-immunisation fever:
2.5 ml (50 mg) followed by one further dose of 2.5 ml (50mg) six hours later if necessary. No more than 2 doses in 24 hours. If fever is not reduced, consult a doctor.

Do not give to children under 3 months of age.

The lowest effective dose should be used for the shortest duration necessary to relieve symptoms (see section 4.4).

For children aged ≥3 months to ≤5 months: if the child's symptoms worsen or if the symptoms persist for more than 24 hours, consult a doctor

For children aged 6 months and over: if symptoms worsen or if the symptoms persist for more than 3 days, consult a doctor

4.3 Contraindications

Hypersensitivity to Ibuprofen or to any of the excipients listed in section 6.1.

Patients who have previously shown hypersensitivity reactions (e.g. asthma, rhinitis, angioedema or urticaria) in response to aspirin or other non-steroidal anti-inflammatory drugs.

Active or history of recurrent peptic ulcer / haemorrhage (two or more distinct episodes of proven ulceration or bleeding).

History of gastrointestinal bleeding or perforation, related to previous NSAIDs therapy.

Severe heart failure (NYHA Class IV), renal failure or hepatic failure (see section 4.4).

Last trimester of pregnancy (See section 4.6).

4.4 Special warnings and precautions for use

Undesirable effects may be minimised by using the lowest effective dose for the shortest duration necessary to relieve symptoms (see GI and cardiovascular risks below).

The elderly have an increased frequency of adverse reactions to NSAIDs especially gastrointestinal bleeding and perforation, which may be fatal.

Masking of symptoms of underlying infections:
This medicine can mask symptoms of infection, which may lead to delayed initiation of appropriate treatment and thereby worsening the outcome of the infection. This has been observed in bacterial community acquired pneumonia and bacterial complications to varicella. When this medicine is administered for fever or pain relief in relation to infection, monitoring of infection is advised. In nonhospital settings, the patient should consult a doctor if symptoms persist or worsen.

Respiratory:
Bronchospasm may be precipitated in patients suffering from or with a previous history of bronchial asthma or allergic disease.

Other NSAIDs:
The use of ibuprofen with concomitant NSAIDs including cyclooxygenase-2 selective inhibitors should be avoided (see section 4.5).

SLE and mixed connective tissue disease:
Systemic lupus erythematosus and mixed connective tissue disease – increased risk of aseptic meningitis (see Section 4.8).

Renal:
Renal impairment as renal function may further deteriorate (see sections 4.3 and 4.8).
Renal tubular acidosis and hypokalaemia may occur following acute overdose and in patients taking ibuprofen products over long periods at high doses (typically greater than 4 weeks), including doses exceeding the recommended daily dose.

Hepatobiliary disorders:
Hepatic dysfunction (see sections 4.3 and 4.8)

Cardiovascular and cerebrovascular effects:
Caution (discussion with doctor or pharmacist) is required prior to starting treatment in patients with a history of hypertension and/or heart failure as fluid retention, hypertension and oedema have been reported in association with NSAID therapy.

Clinical studies suggest that use of ibuprofen, particularly at a high dose (2400 mg/day) may be associated with a small increased risk of arterial thrombotic events (for example myocardial infarction or stroke)

Overall, epidemiological studies do not suggest that low dose ibuprofen (e.g. ≤ 1200 mg/day) is associated with an increased risk of arterial thrombotic events.

Patients with uncontrolled hypertension, congestive heart failure (NYHA II-III), established ischaemic heart disease, peripheral arterial disease, and/or cerebrovascular disease should only be treated with ibuprofen after careful consideration and high doses (2400 mg/day) should be avoided.

Careful consideration should also be exercised before initiating long-term treatment of patients with risk factors for cardiovascular events (e.g. hypertension, hyperlipidaemia, diabetes mellitus, smoking), particularly if high doses of ibuprofen (2400 mg/day) are required.

Avoid use immediately before or after heart surgery.

Caution should be exercised in patients taking a diuretic.

Cases of Kounis syndrome have been reported in patients treated with ibuprofen. Kounis syndrome has been defined as cardiovascular symptoms secondary to an allergic or hypersensitive reaction associated with constriction of coronary arteries and potentially leading to myocardial infarction.

Impaired female fertility:
There is limited evidence that drugs which inhibit cyclooxygenase / prostaglandin synthesis may cause impairment of female fertility by an effect on ovulation. This is reversible on withdrawal of treatment. The use of Ibuprofen is therefore not recommended in women attempting to conceive.

Gastrointestinal:
NSAIDs should be given with care to patients with a history of gastrointestinal disease (ulcerative colitis, Crohn's disease) as these conditions may be exacerbated (see section 4.8).

GI bleeding, ulceration or perforation, which can be fatal, has been reported with all NSAIDs at any time during treatment, with or without warning symptoms or a previous history of serious GI events.

The risk of GI bleeding, ulceration or perforation is higher with increasing NSAID doses, in patients with a history of ulcer, particularly if complicated with haemorrhage or perforation (see section 4.3) and in the elderly. These patients should commence treatment on the lowest dose available.

Patients with a history of GI toxicity, particularly when elderly, should report any unusual abdominal symptoms (especially GI bleeding) particularly in the initial stages of treatment. Caution should be advised in patients receiving concomitant medications which could increase the risk of ulceration or bleeding, such as oral corticosteroids, anticoagulants such as warfarin, selective serotonin-reuptake inhibitors or anti-platelet agents such as aspirin (see section 4.5).

Caution should be taken when using ibuprofen with excessive alcohol or heavy alcohol drinkers. Alcohol may increase the risk of gastrointestinal bleeding.

Where GI bleeding or ulceration occurs in patients receiving Ibuprofen, the treatment should be withdrawn.

Immune System:
Ibuprofen may cause severe allergic reactions including very rare cases of anaphylaxis (see section 4.8). Symptoms may include hives, facial swelling, asthma (wheezing), shock, skin reddening, rash or blisters. If any of these symptoms occur, patients should stop use and seek medical help right away.

Severe cutaneous adverse reactions (SCARs):
Severe cutaneous adverse reactions (SCARs), including exfoliative dermatitis, erythema multiforme, Stevens-Johnson Syndrome (SJS) and Toxic Epidermal Necrolysis (TEN), Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS syndrome), and acute generalized exanthematous pustulosis (AGEP), which can be life-threatening or fatal, have been reported in association with the use of ibuprofen (see section 4.8). Most of these reactions occurred within the first month. If signs and symptoms suggestive of these reactions appear ibuprofen should be withdrawn immediately and an alternative treatment considered (as appropriate).

Dehydration:
There is a risk of renal impairment in dehydrated children.

This product contains maltitol. Patients with rare hereditary problems of fructose intolerance should not take this medicine. Maltitol may have a laxative effect. The calorific value of maltitol is 2.3 kcal/g.

Sodium methylhydroxybenzoate (E219) and sodium propylhydroxybenzoate (E217) may cause allergic reactions which could possibly be delayed.

This medicine contains 4.67mg propylene glycol (E1520) in each 5 ml dose, which is equivalent to 0.93 mg/ml.

This medicine contains 0.0005 mg of alcohol (ethanol) in each 5ml. The amount in 5ml of this medicine is equivalent to less than 1ml beer or wine. The small amount of alcohol in this medicine will not have any noticeable effects.
This medicine contains less than 1 mmol sodium (23 mg) per 5ml, that is to say essentially ‘sodium-free’.

<u>The Label will include:</u>
Read the enclosed leaflet before taking this product.
Do not give this product if your baby or child

- Has (or has had two or more episodes of) a stomach ulcer, perforation or bleeding

- Is allergic to Ibuprofen or any other ingredient of the product, aspirin or other related painkillers
- Is taking other NSAID painkillers, or aspirin with a daily dose above 75mg

Speak to a pharmacist or your doctor before giving this product if your baby or child

- Has or has had asthma, diabetes, high cholesterol, high blood pressure, a stroke, heart, liver, kidney or bowel problems, or is dehydrated

If you are an adult taking this product you should not take this product in the last 3 months of pregnancy and you should contact your doctor or pharmacist before taking it in the first 6 months of pregnancy, if trying to get pregnant, if you are elderly or if you are a smoker.

Do not give to babies aged from 3 to under 6 months for more than 24 hours.

Do not give to children aged 6 months and older for more than 3 days.

If symptoms persist or worsen, consult your doctor promptly.

Do not exceed the stated dose.

Not recommended for children under 3 months.

4.5 Interaction with other medicinal products and other forms of interaction

Ibuprofen should be avoided in combination with:
Aspirin / Acetylsalicylic acid: Unless low-dose aspirin (not above 75mg daily) has been advised by a doctor, as this may increase the risk of adverse reactions (See section 4.4).

Concomitant administration of ibuprofen and acetylsalicylic acid is not generally recommended because of the potential of increased adverse effects.

Experimental data suggest that ibuprofen may competitively inhibit the effect of low dose acetylsalicylic acid on platelet aggregation when they are dosed concomitantly. Although there are uncertainties regarding extrapolation of these data to the clinical situation, the possibility that regular, long-term use of ibuprofen may reduce the cardioprotective effect of low-dose acetylsalicylic acid cannot be excluded. No clinically relevant effect is considered to be likely for occasional ibuprofen use (see section 5.1).

Other NSAIDs including cyclooxygenase-2 selective inhibitors: Avoid concomitant use of two or more NSAIDs as this may increase the risk of adverse effects (see section 4.4).

Ibuprofen should be used with caution in combination with:
Anti-coagulants: NSAIDs may enhance the effects of anti-coagulants, such as warfarin (see section 4.4)

Anti-hypertensives and diuretics: NSAIDs may diminish the effect of these drugs. Diuretics can increase the risk of nephrotoxicity of NSAIDs.

Corticosteroids: Increased risk of gastrointestinal ulceration or bleeding (see section 4.4).

Anti-platelet agents and selective serotonin reuptake inhibitors (SSRIs): increased risk of gastrointestinal bleeding (see section 4.4)

Cardiac glycosides: NSAIDs may exacerbate cardiac failure, reduce GFR and increase plasma glycoside levels.

Lithium: There is evidence for potential increases in plasma levels of lithium.

Methotrexate: There is potential for an increase in plasma methotrexate.

Ciclosporin: Increased risk of nephrotoxicity.

Mifepristone: NSAIDs should not be used for 8-12 days after mifepristone administration as NSAIDs can reduce the effect of mifepristone.

Tacrolimus: Possible increased risk of nephrotoxicity when NSAIDs are given with tacrolimus.

Zidovudine: Increased risk of haematological toxicity when NSAIDs are given with zidovudine. There is evidence of an increased risk of haemarthroses and haematoma in HIV (+) haemophiliacs receiving concurrent treatment with zidovudine and Ibuprofen.

Quinolone antibiotics: Animal data indicate that NSAIDs can increase the risk of convulsions associated with quinolone antibiotics. Patients taking NSAIDs and quinolones may have an increased risk of developing convulsions.

4.6 Fertility, pregnancy and lactation

Pregnancy
Inhibition of prostaglandin synthesis may adversely affect the pregnancy and/or the embryo/foetal development. Data from epidemiological studies suggest an increased risk of miscarriage and of cardiac malformation and gastroschisis after use of a prostaglandin synthesis inhibitor in early pregnancy. The absolute risk for cardiovascular malformation was increased from less than 1%, up to approximately 1.5 %. The risk is believed to increase with dose and duration of therapy. In animals, administration of a prostaglandin synthesis inhibitor has been

shown to result in increased pre- and post-implantation loss and embryo-foetal lethality. In addition, increased incidences of various malformations, including cardiovascular, have been reported in animals given a prostaglandin synthesis inhibitor during the organogenetic period. From the 20th week of pregnancy onward, this medicine use may cause oligohydramnios resulting from foetal renal dysfunction. This may occur shortly after treatment initiation and is usually reversible upon discontinuation. In addition, there have been reports of ductus arteriosus constriction following treatment in the second trimester, most of which resolved after treatment cessation. Therefore, during the first and second trimester of pregnancy, this medicine should not be given unless clearly necessary. If this medicine is used by a woman attempting to conceive, or during the first and second trimester of pregnancy, the dose should be kept as low and duration of treatment as short as possible.
Antenatal monitoring for oligohydramnios and ductus arteriosus constriction should be considered after exposure to this medicine for several days from gestational week 20 onward. This medicine should be discontinued if oligohydramnios or ductus arteriosus constriction are found.
During the third trimester of pregnancy, all prostaglandin synthesis inhibitors may expose the foetus to:

- cardiopulmonary toxicity (premature constriction/ closure of the ductus arteriosus and pulmonary hypertension).
- renal dysfunction (see above).

the mother and the neonate, at the end of pregnancy, to:

- possible prolongation of bleeding time, an anti-aggregating effect which may occur even at very low doses.
- inhibition of uterine contractions resulting in delayed or prolonged labour.

Consequently, this medicine is contraindicated during the third trimester of pregnancy (see sections 4.3 and 5.3).

Breast-feeding
In limited studies, Ibuprofen appears in breast milk in very low concentration and is unlikely to affect breast-fed infants adversely.

Fertility
See section 4.4 regarding female fertility.

4.7 Effects on ability to drive and use machines

None expected at recommended doses and duration of therapy.

4.8 Undesirable effects

Hypersensitivity reactions have been reported and these may consist of:
a) non-specific allergic reactions and anaphylaxis,

b) respiratory tract reactivity e.g. asthma, aggravated asthma, bronchospasm or dyspnoea,
c) various skin reactions, e.g. pruritus, urticaria, angioedema and more rarely exfoliative and bullous dermatoses (including epidermal necrolysis and erythema multiforme).

The following list of adverse effects relates to those experienced with Ibuprofen at OTC doses, for short-term use. In the treatment of chronic conditions, under long-term treatment, additional adverse effects may occur.

The adverse drug reactions (ADRs) observed in patients treated with ibuprofen are listed below by System Organ Class. Frequencies are defined in accordance with current guidance as: Very common (≥1/10); common (≥1/100 to <1/10); uncommon (≥1/1,000 to <1/100); rare (≥1/10,000 to <1/1,000); very rare (<1/10,000), not known frequency (cannot be estimated from the available data).

ADRs are presented by frequency category based on 1) incidence in adequately designed clinical trials or epidemiology studies, when available, or 2) when incidence is unavailable, frequency category is listed as 'Not Known'.

System Organ Class	***Incidence***	***Adverse Drug Reaction***
Blood & lymphatic system disorders	*Very rare*	*Haematopoietic disorders (Anaemia, Leucopenia, Thrombocytopenia, Pancytopenia, Agranulocytosis). First signs are fever, sore throat, superficial mouth ulcers, flu-like symptoms, severe exhaustion, unexplained bleeding and bruising*
Immune system disorders	*Uncommon*	*Hypersensitivity reactions with urticaria and pruritus*
	Very rare	*Severe hypersensitivity reactions: Symptoms could be facial, tongue and laryngeal swelling, dyspnoea, tachycardia, hypotension (anaphylaxis, angioedema, or severe shock)*
	Very rare	*Exacerbation of asthma and Bronchospasm*
	Not known	*In patients with existing auto-immune disorders (such as systemic lupus erythematosus, mixed connective tissue disease) during treatment with Ibuprofen, single cases of symptoms of aseptic meningitis, such as stiff neck, headache, nausea, vomiting, fever or disorientation have been observed (see section 4.4)*
Nervous system disorders	*Uncommon*	*Headache*
	Very rare	*Aseptic meningitis – single cases have been reported very rarely.*
	Not known	*Stroke**
Cardiac disorders	*Not known*	*Kounis syndrome*
	Not known	*Myocardial infarction**

	Not known	*Oedema, Hypertension and Cardiac failure have been reported in association with NSAID treatment*
Gastrointestinal disorders	*Uncommon*	*Abdominal pain*
	Uncommon	*Dyspepsia*
	Uncommon	*Nausea*
	Rare	*Constipation*
	Rare	*Diarrhoea*
	Rare	*Flatulence*
	Rare	*Gastrointestinal ulcer haemorrhage*
	Rare	*Vomiting*
	Very rare	*Exacerbation of Colitis and Crohn's disease (see section 4.4)*
	Very rare	*Gastritis*
	Very rare	*Gastrointestinal haemorrhage, Melaena, Haematemesis, sometimes fatal, particularly in the elderly*
	Very rare	*Peptic ulcer*
	Very rare	*Perforation*
	Very rare	*Ulcerative stomatitis*
Hepatobiliary disorders	*Very rare*	*Liver disorders*
Skin and subcutaneous tissue disorders	*Uncommon*	*Various skin rashes*
	Very rare	*Severe cutaneous adverse reactions (SCARs) such as bullous reactions (including Stevens-Johnson Syndrome, Erythema multiforme, exfoliative dermatitis and Toxic Epidermal Necrolysis)*
	Not known	*Acute Generalised Exanthematous Pustulosis (AGEP)*
	Not known	*Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS syndrome)*
	Not known	*Photosensitivity reactions*
Metabolism and Nutrition Disorders	*Not known*	*Hypokalaemia***
Renal and urinary disorders	*Very rare*	*Acute Renal failure*
	Very rare	*Papillary necrosis especially in long term use, associated with increased serum urea and oedema*
	Not known	*Renal impairment*
	Not known	*Renal tubular acidosis***

*Clinical studies suggest that use of ibuprofen, particularly at a high dose (2400 mg/day) may be associated with a small increased risk of arterial thrombotic events (for example myocardial infarction or stroke) (see section 4.4).
**Renal tubular acidosis and hypokalaemia have been reported in the post-marketing setting typically following prolonged use of the ibuprofen component at higher than recommended doses.

Reporting of suspected adverse reactions
Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the Yellow Card Scheme at: www.mhra.gov.uk/yellowcard or search for MHRA Yellow Card in the Google Play or Apple App Store.

4.9 Overdose

In children, ingestion of more than 400mg/kg may cause symptoms. In adults the dose response effect is less clear-cut. The half-life in overdose is 1.5 –3 hours.

Symptoms

Most patients who have ingested clinically important amounts of NSAIDs will develop no more than nausea, vomiting, epigastric pain, abdominal pain or more rarely diarrhoea. Tinnitus, headache and gastrointestinal bleeding are also possible. In more serious poisoning, toxicity is seen in the central nervous system, manifesting as lethargy and drowsiness, occasionally excitation and disorientation or coma. Occasionally patients develop convulsions.

In serious poisoning metabolic acidosis may occur and the prothrombin time/ INR may be prolonged, probably due to interference with the actions of circulating clotting factors. Acute renal failure and liver damage may occur.

Exacerbation of asthma is possible in asthmatics. Rhabdomyolysis, hypothermia and apnoea (primarily in children) may also rarely occur. Cardiovascular toxicity, including hypotension, cardiac arrhythmias, including ST-segment and T-wave changes, have been reported; ventricular tachycardia/ventricular fibrillation cardiac arrest, and prolonged QTc occurred in fatal cases.

Prolonged use at higher than recommended doses may result in severe hypokalaemia and renal tubular acidosis. Symptoms may include reduced level of consciousness and generalised weakness (see section 4.4 and section 4.8).

Management

Management should be symptomatic and supportive and include the maintenance of a clear airway and monitoring of cardiac and vital signs until stable. Consider oral administration of activated charcoal if the patient presents within 1 hour of ingestion of a potentially toxic amount. If frequent or prolonged, convulsions should be treated with intravenous diazepam or lorazepam. Give bronchodilators for asthma.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic Properties

Pharmacotherapeutic group: Anti-inflammatory and antirheumatic products, non-steroids; propionic acid derivative

ATC Code: M01AE01

Ibuprofen is a propionic acid derivative NSAID that has demonstrated its efficacy by inhibition of prostaglandin synthesis. In humans Ibuprofen reduces inflammatory pain, swellings and fever. Furthermore, Ibuprofen reversibly inhibits platelet aggregation.

Experimental data suggest that ibuprofen may competitively inhibit the effect of low dose acetylsalicylic acid on platelet aggregation when they are dosed concomitantly. Some pharmacodynamic studies show that when single doses of ibuprofen 400 mg were taken within 8 h before or within 30 min after immediate release acetylsalicylic acid dosing (81 mg), a decreased effect of acetylsalicylic acid on the formation of thromboxane or platelet aggregation occurred. Although there are uncertainties regarding extrapolation of these data to the clinical situation, the possibility that regular, long-term use of ibuprofen may reduce the cardioprotective effect of low-dose acetylsalicylic acid cannot be excluded. No clinically relevant effect is considered to be likely for occasional ibuprofen use (see section 4.5).

5.2 Pharmacokinetic Properties

Ibuprofen is rapidly absorbed from the gastro-intestinal tract and rapidly distributed throughout the whole body. Peak plasma concentrations occur about 1 to 2 hours after ingestion with food or in 45 minutes if taken on an empty stomach. These times may vary with different dosage forms.

The excretion is rapid and complete via the kidneys.

The elimination half-life is about 2 hours.

It is metabolized to two inactive metabolites and these are rapidly excreted in urine. About 1 percent is excreted in urine as unchanged Ibuprofen and about 14 percent as conjugated Ibuprofen.

Ibuprofen is extensively bound to plasma proteins.

In limited studies, Ibuprofen appears in breast milk in very low concentrations.

5.3 Preclinical safety data

No relevant information additional to that contained elsewhere in the SPC.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Glycerol (E422)
xanthan gum
maltitol syrup (Lycasin 80/55 (E965))
polysorbate 80
saccharin sodium (E954)
citric acid monohydrate
sodium methylhydroxybenzoate (E219)
sodium propylhydroxybenzoate (E217)
purified water and
strawberry flavour (containing propylene glycol (E1520) and ethanol).

6.2 Incompatibilities

Not applicable.

6.3 Shelf Life

3 years.

6.4 Special precautions for storage

Do not store above 25ºC.
Keep out of the sight and reach of children.

6.5 Nature and contents of containers

Amber glass bottle sealed with a child resistant, tamper evident cap. A syringe with a 2.5 ml and 5 ml measure is supplied with this pack.
Pack sizes: 100ml

6.6 Special precautions for disposal and other handling

Shake well before use. Return any leftover medicine to the Pharmacist.

7. MARKETING AUTHORISATION HOLDER

McNeil Products Limited
1 Station Hill Square
Station Hill
Reading

RG1 1LN
UK

8. MARKETING AUTHORISATION NUMBER

PL 15513/0147

9. DATE OF FIRST AUTHORISATION/RENEWAL OF AUTHORISATION

21st July 2006

10. DATE OF REVISION OF THE TEXT

12 Mar 2026

SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

Calprofen Ibuprofen Suspension

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Ibuprofen 100 mg / 5ml

Excipients with known effect
Also contains maltitol syrup (E965), sodium methylhydroxybenzoate (E219), sodium propylhydroxybenzoate (E217), propylene glycol (E1520), sodium (contains 1.86mg per 5ml) and ethanol.

For the full list of excipients - see section 6.1

3. PHARMACEUTICAL FORM

100 mg / 5ml Oral Suspension
Sugar free, colour free, strawberry flavoured white uniform suspension.

4. CLINICAL PARTICULARS

4.1. Therapeutic Indications

Prescription and OTC: Calprofen Ibuprofen Suspension is used as an analgesic for relief of mild to moderate muscular pain, rheumatic pain, post-immunisation pyrexia, symptomatic relief of headache, earache, dental pain, dysmenorrhoea, neuralgia, migraine and backache. It can also be used in minor injuries such as sprains and strains. Ibuprofen 100 mg / 5 ml Ibuprofen Suspension is effective in the relief of feverishness and symptoms of colds and influenza.

In the treatment of non-articular rheumatic conditions, Calprofen Ibuprofen Suspension is indicated for periarticular conditions such as frozen shoulder (capsulitis), bursitis, tendonitis, tenosynovitis and low back pain. Calprofen Ibuprofen Suspension can also be used in soft tissue injuries such as sprains and strains.

4.2 Posology and Method of Administration

For oral administration and short-term use only.

Children:

For pain and fever - 20mg/kg/day in divided doses (including OTC use).

Infants 3-6 months weighing more than 5 kg:	One 2.5 ml dose may be taken 3 times in 24 hours
Infants 6-12 months:	2.5ml three times a day.
Children 1-2 years:	2.5ml three to four times a day
Children 3-7 years:	5ml three to four times a day
Children 8-12 years:	10ml three to four times a day.

Post-immunisation fever: 2.5ml (50mg) followed by one further dose of 2.5ml (50mg) six hours later if necessary. No more than 2 doses in 24 hours. If fever is not reduced, consult a doctor.

For Juvenile Rheumatoid Arthritis (prescription only use): Doses up to 30-40mg/kg/day may be taken in three or four divided doses.

Elderly: No special dosage modifications are required unless renal or hepatic function is impaired, in which case dosage should be assessed individually.

Do not give to children under 3 months of age.

The lowest effective dose should be used for the shortest duration necessary to relieve symptoms (see section 4.4).

For children aged ≥3 months to ≤5 months: if the child's symptoms worsen or if the symptoms persist for more than 24 hours, consult a doctor

For children aged 6 months and over: if symptoms worsen or if the symptoms persist for more than 3 days, consult a doctor

4.3. Contraindications

Hypersensitivity to Ibuprofen or to any of the excipients listed in section 6.1.

Patients who have previously shown hypersensitivity reactions (e.g. asthma, rhinitis, angioedema or urticaria) in response to aspirin or other non-steroidal anti-inflammatory drugs.

Active or history of recurrent peptic ulcer/haemorrhage (two or more distinct episodes of proven ulceration or bleeding).

History of gastrointestinal bleeding or perforation, related to previous NSAIDs therapy.

Severe heart failure (NYHA Class IV), renal failure or hepatic failure (see section 4.4).

Last trimester of pregnancy (see section 4.6).

4.4. Special warning and precautions for use

Undesirable effects may be minimised by using the lowest effective dose for the shortest possible duration necessary to relieve symptoms (see GI and cardiovascular risks below).

The elderly have an increased frequency of adverse reactions to NSAIDs, especially gastrointestinal bleeding and perforation, which may be fatal.

Masking of symptoms of underlying infections:
This medicine can mask symptoms of infection, which may lead to delayed initiation of appropriate treatment and thereby worsening the outcome of the infection. This has been observed in bacterial community acquired pneumonia and bacterial complications to varicella. When this medicine is administered for fever or pain relief in relation to infection, monitoring of infection is advised. In nonhospital settings, the patient should consult a doctor if symptoms persist or worsen.

Respiratory:
Bronchospasm may be precipitated in patients suffering from or with a previous history of bronchial asthma or allergic disease.

Other NSAIDs:
The use of Ibuprofen with concomitant NSAIDs including cyclooxygenase-2 selective inhibitors should be avoided (see section 4.5).

SLE and mixed connective tissue disease:
Systemic lupus erythematosus and mixed connective tissue disease – increased risk of aseptic meningitis (see section 4.8).

Renal:
Renal impairment as renal function may further deteriorate (see sections 4.3 and 4.8)
Renal tubular acidosis and hypokalaemia may occur following acute overdose and in patients taking ibuprofen products over long periods at high doses (typically greater than 4 weeks), including doses exceeding the recommended daily dose.

Hepatobiliary disorders:
Hepatic dysfunction (see sections 4.3 and 4.8)

Cardiovascular and cerebrovascular effects:
Caution (discussion with doctor or pharmacist) is required prior to starting treatment in patients with a history of hypertension and/or heart failure as fluid retention, hypertension and oedema have been reported in association with NSAID therapy.

Clinical studies suggest that use of ibuprofen, particularly at a high dose (2400 mg/day) may be associated with a small increased risk of arterial thrombotic events (for example myocardial infarction or stroke). Overall, epidemiological studies do not suggest that low dose ibuprofen (e.g. ≤ 1200 mg/day) is associated

with an increased risk of arterial thrombotic events.

Patients with uncontrolled hypertension, congestive heart failure (NYHA II-III), established ischaemic heart disease, peripheral arterial disease, and/or cerebrovascular disease should only be treated with ibuprofen after careful consideration and high doses (2400 mg/day) should be avoided.

Careful consideration should also be exercised before initiating long-term treatment of patients with risk factors for cardiovascular events (e.g. hypertension, hyperlipidaemia, diabetes mellitus, smoking), particularly if high doses of ibuprofen (2400 mg/day) are required.

Avoid use immediately before or after heart surgery.

Caution should be exercised in patients taking a diuretic.

Cases of Kounis syndrome have been reported in patients treated with ibuprofen. Kounis syndrome has been defined as cardiovascular symptoms secondary to an allergic or hypersensitive reaction associated with constriction of coronary arteries and potentially leading to myocardial infarction.

Impaired female fertility:
There is limited evidence that drugs which inhibit cyclo-oxygenase/prostaglandin synthesis may cause impairment of female fertility by an effect on ovulation. This is reversible upon withdrawal of treatment. The use of ibuprofen is therefore not recommended in women attempting to conceive.

Gastrointestinal:
NSAIDS should be given with care to patients with a history of gastrointestinal disease (ulcerative colitis, Crohn's disease) – as these conditions may be exacerbated (see section 4.8).

GI bleeding, ulceration or perforation, which can be fatal, has been reported with all NSAIDs at any time during treatment, with or without warning symptoms or a previous history of serious GI events.

The risk of GI bleeding, ulceration or perforation is higher with increasing NSAID doses, in patients with a history of ulcer, particularly if complicated with haemorrhage or perforation (see section 4.3), and in the elderly. These patients should commence treatment on the lowest dose available.

Patients with a history of GI toxicity, particularly when elderly, should report any unusual abdominal symptoms (especially GI bleeding) particularly in the initial stages of treatment.

Caution should be advised in patients receiving concomitant medications which could increase the risk of ulceration or bleeding, such as oral corticosteroids, or anticoagulants such as warfarin, selective serotonin-reuptake inhibitors or anti-platelet agents such as aspirin (see section 4.5).

Caution should be taken when using ibuprofen with excessive alcohol or heavy alcohol drinkers. Alcohol may increase the risk of gastrointestinal bleeding.

When GI bleeding or ulceration occurs in patients receiving ibuprofen, the treatment should be withdrawn.

Immune system:
Ibuprofen may cause severe allergic reactions including very rare cases of anaphylaxis (see section 4.8). Symptoms may include hives, facial swelling, asthma (wheezing), shock, skin reddening, rash or blisters. If any of these symptoms occur, patients should stop use and seek medical help right away.

Severe cutaneous adverse reactions (SCARs):
Severe cutaneous adverse reactions (SCARs), including exfoliative dermatitis, erythema multiforme, Stevens-Johnson Syndrome (SJS) and Toxic Epidermal Necrolysis (TEN), Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS syndrome), and acute generalized exanthematous pustulosis (AGEP), which can be life-threatening or fatal, have been reported in association with the use of ibuprofen (see section 4.8). Most of these reactions occurred within the first month. If signs and symptoms suggestive of these reactions appear ibuprofen should be withdrawn immediately and an alternative treatment considered (as appropriate).

Dehydration:
There is a risk of renal impairment in dehydrated children.

This product contains maltitol. Patients with rare hereditary problems of fructose intolerance should not take this medicine. Maltitol may have a laxative effect. The calorific value of maltitol is 2.3 kcal/g.

Sodium methylhydroxybenzoate (E219) and sodium propylhydroxybenzoate (E217) may cause allergic reactions which could possibly be delayed.

This medicine contains 4.67mg propylene glycol (E1520) in each 5 ml dose, which is equivalent to 0.93 mg/ml.

This medicine contains 0.0005 mg of alcohol (ethanol) in each 5ml. The amount in 5ml of this medicine is equivalent to less than 1ml beer or wine. The small amount of alcohol in this medicine will not have any noticeable effects.

This medicine contains less than 1mml sodium (23mg) per 5ml, that is to say essentially ‘sodium-free’.

<u>The label will include:</u>
Read the enclosed leaflet before taking this product.

Do not give this product if your baby or child
- Has (or has had two or more episodes of) a stomach ulcer, perforation or bleeding

- Is allergic to ibuprofen or any other ingredient of the product, aspirin or other related painkillers
- Is taking other NSAIDs painkillers, or aspirin with a daily dose above 75 mg

Speak to a pharmacist or your doctor before giving this product if your baby or child
- Has or has had asthma, diabetes, high cholesterol, high blood pressure, a stroke, heart, liver, kidney or bowel problems, or is dehydrated

If you are an adult taking this product you should not take this product in the last 3 months of pregnancy and you should contact your doctor or pharmacist before taking it in the first 6 months of pregnancy, if trying to get pregnant, if you are elderly or if you are a smoker.

Do not give to babies aged from 3 to under 6 months for more than 24 hours.

Do not give to children aged 6 months and older for more than 3 days.

If symptoms persist or worsen, consult your doctor promptly.

Do not exceed the stated dose.

Not recommended for children under 3 months.

4.5. Interaction with Other Medicinal Products and Other Forms of Interaction

Ibuprofen should be avoided in combination with:
Aspirin/Acetylsalicylic acid: Unless low-dose aspirin (not above 75mg daily) has been advised by a doctor, as this may increase the risk of adverse reactions (see section 4.4).

Concomitant administration of ibuprofen and acetylsalicylic acid is not generally recommended because of the potential of increased adverse effects.

Experimental data suggest that ibuprofen may competitively inhibit the effect of low dose acetylsalicylic acid on platelet aggregation when they are dosed concomitantly. Although there are uncertainties regarding extrapolation of these data to the clinical situation, the possibility that regular, long-term use of ibuprofen may reduce the cardioprotective effect of low-dose acetylsalicylic acid cannot be excluded. No clinically relevant effect is considered to be likely for occasional ibuprofen use (see section 5.1).

Other NSAIDs including cyclooxygenase-2 selective inhibitors: Avoid concomitant use of two or more NSAIDs as this may increase the risk of adverse effects (see section 4.4).

Ibuprofen should be used with caution in combination with:

Anticoagulants: NSAIDs may enhance the effects of anticoagulants, such as warfarin (see section 4.4).

Antihypertensives and diuretics: NSAIDs may diminish the effect of these drugs. Diuretics can increase the risk of nephrotoxicity of NSAIDs.

Corticosteroids: Increased risk of gastrointestinal ulceration or bleeding (see section 4.4).

Anti-platelet agents and selective serotonin reuptake inhibitors (SSRIs): increased risk of gastrointestinal bleeding (see section 4.4)

Cardiac glycosides: NSAIDs may exacerbate cardiac failure, reduce GFR and increase plasma glycoside levels.

Lithium: There is evidence for potential increases in plasma levels of lithium.

Methotrexate: There is a potential for an increase in plasma methotrexate.

Ciclosporin: increased risk of nephrotoxicity.

Mifepristone: NSAIDs should not be used for 8-12 days after mifepristone administration as NSAIDs can reduce the effects of mifepristone.

Tacrolimus: possible increased risk of nephrotoxicity when NSAIDs are given with tacrolimus.

Zidovudine: Increased risk of haematological toxicity when NSAIDs are given with zidovudine. There is evidence of an increased risk of haemarthroses and haematoma in HIV (+) haemophiliacs receiving concurrent treatment with zidovudine and ibuprofen.

Quinolone antibiotics: animal data indicate that NSAIDs can increase the risk of convulsions associated with quinolone antibiotics. Patients taking NSAIDs and quinolones may have an increased risk of developing convulsions.

4.6. Fertility, Pregnancy and Lactation

Pregnancy

Inhibition of prostaglandin synthesis may adversely affect the pregnancy and/or the embryo/foetal development. Data from epidemiological studies suggest an increased risk of miscarriage and of cardiac malformation and gastroschisis after use of a prostaglandin synthesis inhibitor in early pregnancy. The absolute risk for cardiovascular malformation was increased from less than 1%, up to approximately 1.5 %. The risk is believed to increase with dose and duration of therapy. In animals, administration of a prostaglandin synthesis inhibitor has been shown to result in increased pre- and post-implantation loss and embryo-foetal lethality. In addition, increased incidences of various malformations, including

cardiovascular, have been reported in animals given a prostaglandin synthesis inhibitor during the organogenetic period. From the 20th week of pregnancy onward, this medicine use may cause oligohydramnios resulting from foetal renal dysfunction. This may occur shortly after treatment initiation and is usually reversible upon discontinuation. In addition, there have been reports of ductus arteriosus constriction following treatment in the second trimester, most of which resolved after treatment cessation. Therefore,during the first and second trimester of pregnancy, this medicine should not be given unless clearly necessary. If this medicine is used by a woman attempting to conceive, or during the first and second trimester of pregnancy, the dose should be kept as low and duration of treatment as short as possible.
Antenatal monitoring for oligohydramnios and ductus arteriosus constriction should be considered after exposure to this medicine for several days from gestational week 20 onward. This medicine should be discontinued if oligohydramnios or ductus arteriosus constriction are found.
During the third trimester of pregnancy, all prostaglandin synthesis inhibitors may expose the foetus to:

- cardiopulmonary toxicity (premature constriction/ closure of the ductus arteriosus and pulmonary hypertension);
- renal dysfunction (see above);

the mother and the neonate, at the end of pregnancy, to:

- possible prolongation of bleeding time, an anti-aggregating effect which may occur even at very low doses.
- inhibition of uterine contractions resulting in delayed or prolonged labour.

Consequently, this medicine is contraindicated during the third trimester of pregnancy (see sections 4.3 and 5.3).

Breastfeeding
In limited studies, ibuprofen appears in breast milk in very low concentrations and is unlikely to affect the breastfed infant adversely.

Fertility
See section 4.4 regarding female fertility.

4.7. Effects On Ability to Drive And Use Machines

None expected at recommended doses and duration of therapy.

4.8. Undesirable effects

Hypersensitivity reactions have been reported and these may consist of:

a) non-specific allergic reactions and anaphylaxis
b) respiratory tract reactivity, e.g. asthma, aggravated asthma, bronchospasm or dyspnoea
c) various skin reactions, e.g. pruritus, urticaria, angioedema and more rarely exfoliative and bullous dermatoses (including epidermal necrolysis and erythema multiforme).

The following list of adverse events relates to those experienced with ibuprofen at OTC doses, for short-term use. In the treatment of chronic conditions, under long-term treatment, additional adverse effects may occur.

The adverse drug reactions (ADRs) observed in patients treated with ibuprofen are listed below by System Organ Class. Frequencies are defined in accordance with current guidance as: Very common (≥1/10); common (≥1/100 to<1/10); uncommon (≥1/1,000 to <1/100); rare (≥1/10,000 to <1/1,000); very rare (<1/10,000), not known frequency (cannot be estimated from the available data).

ADRs are presented by frequency category based on 1) incidence in adequately designed clinical trials or epidemiology studies, when available, or 2) when incidence is unavailable, frequency category is listed as 'Not Known'.

System Organ Class	*Incidence*	*Adverse Drug Reaction*
Blood & lymphatic system disorders	*Very rare*	*Haematopoietic disorders (Anaemia, Leucopenia, Thrombocytopenia, Pancytopenia, Agranulocytosis). First signs are fever, sore throat, superficial mouth ulcers, flu-like symptoms, severe exhaustion, unexplained bleeding and bruising*
Immune system disorders	*Uncommon*	*Hypersensitivity reactions with urticaria and pruritus*
	Very rare	*Severe hypersensitivity reactions: Symptoms could be facial, tongue and laryngeal swelling, dyspnoea, tachycardia, hypotension (anaphylaxis, angioedema, or severe shock)*
	Very rare	*Exacerbation of asthma and Bronchospasm*
	Not known	*In patients with existing auto-immune disorders (such as systemic lupus erythematosus, mixed connective tissue disease) during treatment with Ibuprofen, single cases of symptoms of aseptic meningitis, such as stiff neck, headache, nausea, vomiting, fever or disorientation have been observed (see section 4.4)*
Nervous system disorders	*Uncommon*	*Headache*
	Very rare	*Aseptic meningitis – single cases have been reported very rarely*
	Not known	*Stroke**
Cardic disorders	*Not known*	*Kounis syndrome*
	Not known	*Myocardial infarction**
	Not known	*Oedema, Hypertension and Cardiac failure have been reported in association with NSAID treatment*
Gastrointestinal disorders	*Uncommon*	*Abdominal pain*
	Uncommon	*Dyspepsia*

	Uncommon	*Nausea*
	Rare	*Constipation*
	Rare	*Diarrhoea*
	Rare	*Flatulence*
	Rare	*Gastrointestinal ulcer haemorrhage*
	Rare	*Vomiting*
	Very rare	*Exacerbation of Colitis and Crohn's disease (see section 4.4)*
	Very rare	*Gastritis*
	Very rare	*Gastrointestinal haemorrhage, Melaena, Haematemesis, sometimes fatal, particularly in the elderly*
	Very rare	*Peptic ulcer*
	Very rare	*Perforation*
	Very rare	*Ulcerative stomatitis*
Hepatobiliary disorders	*Very rare*	*Liver disorders*
Skin and subcutaneous tissue disorders	*Uncommon*	*Various skin rashes*
	Very rare	*Severe cutaneous adverse reactions (SCARs) such as bullous reactions (including Stevens-Johnson Syndrome, Erythema multiforme, exfoliative dermatitis and Toxic Epidermal Necrolysis)*
	Not known	*Acute Generalised Exanthematous Pustulosis (AGEP)*
	Not known	*Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS syndrome)*
	Not known	*Photosensitivity reactions*
Metabolism and Nutrition Disorders	*Not known*	*Hypokalaemia***
Renal and urinary disorders	*Very rare*	*Acute Renal failure*
	Very rare	*Papillary necrosis especially in long term use, associated with increased serum urea and oedema*
	Not known	*Renal impairment*
	Not known	*Renal tubular acidosis***

*Clinical studies suggest that use of ibuprofen, particularly at a high dose (2400 mg/day) may be associated with a small increased risk of arterial thrombotic events (for example myocardial infarction or stroke) (see section 4.4).
**Renal tubular acidosis and hypokalaemia have been reported in the post-marketing setting typically following prolonged use of the ibuprofen component at higher than recommended doses.

Reporting of suspected adverse reactions
Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected

adverse reactions via the Yellow Card Scheme at: www.mhra.gov.uk/yellowcard or search for MHRA Yellow Card in the Google Play or Apple App Store.

4.9. Overdose

In children ingestion of more than 400 mg/kg may cause symptoms. In adults the dose response effect is less clear cut. The half-life in overdose is 1.5-3 hours.

Symptoms
Most patients who have ingested clinically important amounts of NSAIDs will develop no more than nausea, vomiting, epigastric pain, abdominal pain or more rarely diarrhoea. Tinnitus, headache and gastrointestinal bleeding are also possible. In more serious poisoning, toxicity is seen in the central nervous system, manifesting as lethargy and drowsiness, occasionally excitation and disorientation or coma. Occasionally patients develop convulsions.

In serious poisoning metabolic acidosis may occur and the prothrombin time/ INR may be prolonged, probably due to interference with the actions of circulating clotting factors. Acute renal failure and liver damage may occur.

Exacerbation of asthma is possible in asthmatics. Rhabdomyolysis, hypothermia and apnoea (primarily in children) may also rarely occur. Cardiovascular toxicity, including hypotension, cardiac arrhythmias, including ST-segment and T-wave changes, have been reported; ventricular tachycardia/ventricular fibrillation cardiac arrest, and prolonged QTc occurred in fatal cases.

Prolonged use at higher than recommended doses may result in severe hypokalaemia and renal tubular acidosis. Symptoms may include reduced level of consciousness and generalised weakness (see section 4.4 and section 4.8).

Management
Management should be symptomatic and supportive and include the maintenance of a clear airway and monitoring of cardiac and vital signs until stable. Consider oral administration of activated charcoal if the patient presents within 1 hour of ingestion of a potentially toxic amount. If frequent or prolonged, convulsions should be treated with intravenous diazepam or lorazepam. Give bronchodilators for asthma.

5 PHARMACOLOGICAL PROPERTIES

5.1. Pharmacodynamic Properties

Pharmacotherapeutic group: Anti-inflammatory and antirheumatic products, non-steroids; propionic acid derivative

ATC Code: M01AE01

Ibuprofen is a propionic acid derivative NSAID that has demonstrated its efficacy by inhibition of prostaglandin synthesis. In humans ibuprofen reduces

inflammatory pain, swellings and fever. Furthermore, ibuprofen reversibly inhibits platelet aggregation.

Experimental data suggest that ibuprofen may competitively inhibit the effect of low dose acetylsalicylic acid on platelet aggregation when they are dosed concomitantly. Some pharmacodynamic studies show that when single doses of ibuprofen 400 mg were taken within 8 h before or within 30 min after immediate release acetylsalicylic acid dosing (81 mg), a decreased effect of acetylsalicylic acid on the formation of thromboxane or platelet aggregation occurred. Although there are uncertainties regarding extrapolation of these data to the clinical situation, the possibility that regular, long-term use of ibuprofen may reduce the cardioprotective effect of low-dose acetylsalicylic acid cannot be excluded. No clinically relevant effect is considered to be likely for occasional ibuprofen use (see section 4.5).

5.2. Pharmacokinetic Properties

Ibuprofen is rapidly absorbed following administration and rapidly distributed throughout the whole body. The excretion is rapid and complete via the kidneys.

It is metabolised to two inactive metabolites and these are rapidly excreted in urine. About 1 percent is excreted in urine as unchanged Ibuprofen and about 14 percent as conjugated Ibuprofen.

Ibuprofen is extensively bound to plasma proteins.

Maximum plasma concentrations are reached 45 minutes after ingestion if taken on an empty stomach. When taken with food, peak levels are observed after 1 to 2 hours. These times may vary with different dosage forms.

The half-life of ibuprofen is about 2 hours.

In limited studies, ibuprofen appears in the breast milk in very low concentrations.

5.3 Preclinical Safety Data

No relevant information additional to that contained elsewhere in the SPC.

6 PHARMACEUTICAL PARTICULARS

6.1 List of Excipients

Glycerol (E422)
xanthan gum
maltitol syrup (Lycasin 80/55 (E965))
polysorbate 80
saccharin sodium (E954)
citric acid monohydrate
sodium methylhydroxybenzoate (E219)

sodium propylhydroxybenzoate (E217)
purified water and
strawberry flavour (containing propylene glycol (E1520) and ethanol).

6.2. Incompatibilities

None stated except as in 'Interactions with other medicaments'.

6.3. Shelf Life

3 years

6.4. Special Precautions for Storage

Do not store above 25ºC.
Keep out of the sight and reach of children

6.5. Nature and Contents of Containers

An amber glass bottle sealed with child resistant, tamper evident cap. A syringe with a 2.5 ml and 5 ml measure is supplied with this pack.
Pack sizes available: 200ml
Not all pack sizes may be marketed.

6.6. Special Precautions for Disposal and other handling

Shake well before use. Return any leftover medicine to the Pharmacist.

7. MARKETING AUTHORISATION HOLDER

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8. MARKETING AUTHORISATION NUMBER(S)

PL 15513/0120

9. DATE OF FIRST AUTHORISATION / RENEWAL OF THE AUTHORISATION

02/07/2009

10. DATE OF REVISION OF THE TEXT

13 March 2026

SUMMARY OF PRODUCT CHARACTERISTICS

1 NAME OF THE MEDICINAL PRODUCT

Benylin Children's Apple Flavour Cough Syrup or CalCough Infant Syrup or Benylin Infant's Cough Syrup

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Active ingredient	% v/v	Quantity per 5 ml
Glycerol	15.0	0.75ml

Excipient with known effect:

Maltitol liquid (E965)	1.5ml
Sodium	6.95mg
Sodium benzoate (E211)	10mg
Propylene glycol (E1520)	18.24mg

For the full list of excipients, see section 6.1

3 PHARMACEUTICAL FORM

Syrup
A clear colourless syrup with an apple flavour.

4 CLINICAL PARTICULARS

4.1 Therapeutic indications

For the relief of dry tickly coughs.

4.2 Posology and method of administration

Posology
Children 3 months - 1 year: one 5ml spoonful three to four times a day.
Children 1 to 5 years: two 5ml spoonfuls three to four times a day.
Children under 3 months: not recommended.

Method of administration
For oral use.

4.3 Contraindications

Hypersensitivity to the active substance or to any of the ingredients listed in section 6.1.

Not recommended for children under 3 months.
Patients with rare hereditary problems of fructose intolerance should not take this medicine.

4.4 Special warnings and precautions for use

Diabetics should take note that glycerol may affect blood sugar levels.
If symptoms persist for more than 3 days or get worse, patients should stop use and consult a doctor.

This medicine contains less than 1 mmol sodium (23 mg) per 5ml, that is to say essentially 'sodium-free'.

This medicine contains 10 mg sodium benzoate (E211) in each 5ml which is equivalent to 2mg/ml.

This medicine contains 18.24 mg propylene glycol (E1520) in each 5ml which is equivalent to 3.65 mg/ml.

4.5 Interactions with other medicinal products and other forms of interaction

No clinically significant drug interactions.

4.6 Fertility, pregnancy and lactation

Not applicable.

4.7 Effects on ability to drive and use machines

This medicine has no or negligible influence on the ability to drive and use machines.

4.8 Undesirable effects

Maltitol may have a mild laxative effect.

Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the Yellow Card Scheme at: www.mhra.gov.uk/yellowcard or search for MHRA Yellow Card in the Google Play or Apple App Store.

4.9 Overdose

Symptoms
Overdose with this product may possibly cause diarrhoea.

Treatment
Treatment should be symptomatic and supportive.

5 PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Cough suppressants and mucolytics, ATC code: R05FB01.
Glycerol has demulcent properties and may possibly block sensory cough receptors in the respiratory tract.

5.2 Pharmacokinetic properties

Absorption
Glycerol is readily absorbed from the gastrointestinal tract.

Distribution
Glycerol combines with free fatty acids in the liver to form triglycerides which are distributed to the adipose tissues.

Metabolism
Glycerol undergoes extensive metabolism principally in the liver and to a lesser extent in the kidneys. Glycerol is metabolised to glucose or glycogen or oxidized to carbon dioxide and water.

Elimination
Glycerol may be excreted in the urine unchanged.

5.3 Preclinical safety data

Non-clinical data reveal no special hazard for humans based on studies of repeated dose toxicity, genotoxicity, carcinogenic potential, toxicity to reproduction and development.

6 PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Maltitol liquid (E965)
Hydroxyethylcellulose
Sodium benzoate
Citric acid monohydrate
Sodium citrate
Apple flavouring 5112OIE (containing propylene glycol)
Purified water

6.2 Incompatibilities

None stated

6.3 Shelf-life

3 years

6.4 Special precautions for storage

Keep the bottle tightly closed.
Do not store above 25°C.

6.5 Nature and contents of container

1) Bottle amber PET with polypropylene child resistant closure fitted with expanded polythene liner.
A spoon with a 5 ml, 2.5 ml and 1.25 ml measure is supplied with this pack.
Pack size: 100 ml and 150 ml.
Contained in a box board carton.

2) Bottle amber glass with polypropylene child resistant closure fitted with an expanded polyethylene liner.
A spoon with a 5 ml, 2.5 ml and 1.25 ml measure is supplied with this pack.
Pack size 100, 125ml or 150ml.
Contained in a box board carton.

Not all pack sizes may be marketed.

6.6 Special precautions for disposal

No special requirements for disposal. Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

7 MARKETING AUTHORISATION HOLDER

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8 MARKETING AUTHORISATION NUMBER

PL 15513/0168

9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

19 March 2009

10 DATE OF REVISION OF THE TEXT

07 April 2026

SUMMARY OF PRODUCT CHARACTERISTICS

1 NAME OF THE MEDICINAL PRODUCT

Benylin Dry & Tickly Cough Blackcurrant Syrup
Benylin Children's Dry Cough & Sore Throat Syrup
CalCough Children's Syrup

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Active Ingredient	Quantity per 5ml
Glycerol	0.75ml
Sucrose	1.7g

Excipient with known effect:

Liquid Glucose	2.15g
Propylene glycol	3.53mg
Sodium benzoate (E211)	10mg
Sodium	1.6mg
Benzyl alcohol	0.000053mg

For the full list of excipients, see section 6.1.

3 PHARMACEUTICAL FORM

Syrup
A dark red, blackcurrant flavoured syrup.

4 CLINICAL PARTICULARS

4.1 Therapeutic indications

For the relief of irritating, tickling dry coughs and sore throats.

4.2 Posology and method of administration

Posology
Adults, elderly and children over 5 years: 10ml

Children 1 - 5 years: 5ml
The dose may be repeated three or four times a day.

Children under one year: Not to be given to children under 1 year.

Method of Administration
For oral administration.

4.3 Contraindications

Hypersensitivity to the active substances or to any of the excipients listed in section 6.1.

Do not give to children under one year.

4.4 Special warnings and special precautions for use

Diabetics should take note that sucrose and glycerol may affect blood sugar levels.

Patients with rare hereditary problems of fructose intolerance, glucose galactose malabsorption or sucrase-isomaltase insufficiency should not take this medicine. If symptoms persist for more than 3 days or get worse, patients should stop use and consult a doctor.

This medicine contains 3.53mg propylene glycol (E1520) in each 5ml dose, which is equivalent to 0.71mg/ml.

This medicine contains 10mg sodium benzoate (E211) in each 5ml which is equivalent to 2mg/ml.

This medicine contains less than 1 mmol sodium (23 mg) per 5ml, that is to say essentially 'sodium-free'.

This medicine contains 0.000053mg benzyl alcohol in each 5ml which is equivalent to 0.000011mg/ml. Benzyl alcohol may cause allergic reactions. Ask your doctor or pharmacist for advice if you are pregnant or breast‑feeding or if you have a liver or kidney disease. This is because large amounts of benzyl alcohol can build-up in your body and may cause side effects (called "metabolic acidosis"). Do not use for more than a week in young children (less than 3 years old), unless advised by your doctor or pharmacist. This is due to an increased risk due to accumulation in young children.

4.5 Interaction with other medicinal products and other forms of interaction

No clinically significant interactions known.

4.6 Fertility, pregnancy and lactation

The safety of this medicine during pregnancy and lactation has not been established, but is not considered to constitute a hazard during these periods.

4.7 Effects on ability to drive and use machines

This product has no or negligible influence on the ability to drive and use machines.

4.8 Undesirable effects

Immune system disorder: hypersensitivity reactions, including anaphylaxis.

Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the Yellow Card Scheme at: www.mhra.gov.uk/yellowcard or search for MHRA Yellow Card in the Google Play or Apple App Store.

4.9 Overdose

Management:
Treatment should be symptomatic and supportive.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Cough suppressants and mucolytics, ATC code: R05FB01

Glycerol and sucrose have demulcent properties and will soothe irritated sore throats and possibly block sensory cough receptors within the respiratory tract.

5.2 Pharmacokinetic properties

Absorption
Glycerol is readily absorbed from the gastrointestinal tract.

Sucrose is hydrolysed in the small intestine by the enzyme sucrase to glucose and fructose which are then absorbed.

Distribution
Glycerol combines with free fatty acids in the liver to form triglycerides which are distributed to adipose tissues.

There are limited data on the distribution of oral sucrose in man.

Metabolism
Glycerol undergoes extensive metabolism principally in the liver and to a lesser extent in the kidneys. Glycerol is metabolised to glucose or glycogen or oxidised to carbon dioxide and water.

The hydrolysis products of sucrose are metabolised through different pathways in the body. Glucose elicits a glycaemic and insulinaemic response that stimulates its uptake into cells while fructose is mainly metabolised in the liver via an insulin-independent pathway not regulated by energy supply. Fructose may be converted into trioses that can be used for the de novo synthesis of triglycerides and cholesterol.

Elimination
It may also be excreted in the urine unchanged.

5.3 Preclinical safety data

Non-clinical data reveal no special hazard for humans based on studies of repeated dose toxicity, genotoxicity, carcinogenic potential, toxicity to reproduction and development.

6 PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Citric acid monohydrate
Sodium benzoate E211
Anthocyanin
Blackcurrant Flavour 1740.7107 IFF (containing benzyl alcohol and propylene glycol (E1520))
Blackcurrant Juice 1740.1436 IFF (containing benzyl alcohol and propylene glycol (E1520))
Liquid Glucose
Purified Water

6.2 Incompatibilities

Not applicable.

6.3 Shelf-life

3 years.

6.4 Special precautions for storage

This medicinal product does not require any special storage conditions.

6.5 Nature and contents of container

125ml, 150ml or 200ml white flint glass, or amber glass bottle with an aluminium roll-on pilfer-proof cap with a flowed in liner, or a triseal (LDPE/EPE/LDPE) liner.

Alternative caps: A wadless polypropylene tamper evident cap, or a child resistant polypropylene cap with a EPE liner.

A double ended measuring spoon of 1.25ml, 2.5ml and 5.0ml capacity may optionally be provided with the product.

Not all pack sizes may be marketed.

6.6 Special precautions for disposal

No special requirements for disposal.
Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

7 MARKETING AUTHORISATION HOLDER

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1 Station Hill Square
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UK

8 MARKETING AUTHORISATION NUMBER

PL 15513/0392

9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

24 December 2024

10 DATE OF REVISION OF THE TEXT

3 June 2026

SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

CALGEL TEETHING GEL

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

CALGEL TEETHING GEL contains:
Lidocaine Hydrochloride Monohydrate 0.33% w/w
Cetylpyridinium Chloride 0.10% w/w

Excipients: sorbitol solution (E420), xylitol (E967), ethanol 96% (contains 18.20mg per 0.2g), sodium (contains 0.41mg per 0.2g), benzyl alcohol, benzoic acid (E210), macrogolglycerol hydroxystearate (castor oil polyoxyl hydrogenated) and glycerol.

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Topical gel

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

For relief of pain and discomfort associated with teething in children from 5 months of age, where non-pharmacological treatments have failed to provide sufficient relief.
It also has mild antiseptic properties.

4.2 Posology and method of administration

CALGEL TEETHING GEL is suitable for babies from the age of 5 months.

Apply a pea-sized amount (0.2 grams) of CALGEL TEETHING GEL with a clean finger to the affected area of gum.
The dose may be repeated if necessary after 3 hours, up to a maximum of 6 doses in 24 hours.
Treatment should be stopped once symptoms have resolved.
Not to be used for more than 7 days.

Parents or carers should seek medical attention if the child's condition deteriorates during treatment.
In case of vomiting, spitting or accidental ingestion, the dose should not be repeated immediately. The dose may be repeated if necessary after 3 hours.

4.3 Contraindications

Hypersensitivity to the active substance(s) or to any of the excipients listed in section 6.1.

4.4 Special warnings and precautions for use

Do not use more than one product containing lidocaine at the same time.

The recommended dose should not be exceeded. Keep out of the sight and reach of children.

This medicine contains 29.4mg sorbitol in each 0.2g (pea sized blob). The additive effect of concomitantly administered products containing sorbitol (or fructose) and dietary intake of sorbitol (or fructose) should be taken into account. The content of sorbitol in medicinal products for oral use may affect the bioavailability of other medicinal products for oral use administered concomitantly. Patients with hereditary fructose intolerance (HFI) should not take/be given this medicinal product. Patients with rare hereditary problems of fructose intolerance, glucose-galactose malabsorption or sucrase-isomaltase insufficiency should not take this medicine.

The castor oil may cause stomach upsets, diarrhoea, and skin reactions.

This medicine contains 18.20mg of alcohol (ethanol) in each 0.2g. The amount in 0.2g of this medicine is equivalent to less than 1 ml beer or 1 ml wine.
The small amount of alcohol in this medicine will not have any noticeable effects.

This medicine contains less than 1 mmol sodium (23 mg) per 0.2g, that is to say essentially 'sodium-free'.

This medicine contains 0.00019mg benzyl alcohol in each 0.2g. Benzyl alcohol may cause allergic reactions and/or mild local irritation. Advise patients to not use for more than a week in young children (less than 3 years old). There is increased risk due to accumulation in young children. High volumes should be used with caution and only if necessary, especially in subjects with liver or kidney impairment because of the risk of accumulation and toxicity (metabolic acidosis). Benzyl alcohol has been associated with serious adverse events and death in neonates ("gasping syndrome"). The minimum amount of benzyl alcohol at which toxicity may occur is not known.

This medicine contains 0.00077mg benzoic acid (E210) in each 0.2g. Benzoic acid may cause local irritation. May cause non-immunologic immediate contact

reactions by a possible cholinergic mechanism. Benzoic acid may increase jaundice (yellowing of the skin and eyes) in newborn babies (up to 4 weeks old).

4.5 Interactions with other medicinal products and other forms of interaction

No drug interactions with CALGEL TEETHING GEL are known.

Drug interactions between intravenously administered lidocaine and oral procainamide, oral phenytoin alone or in combination with phenobarbital, primidone or carbamazepine, oral propanolol and non-potassium sparing diuretics including bumetanide, furosemide and thiazide have been reported. These drug effects are unlikely to be relevant to the use of CALGEL TEETHING GEL.

4.6 Fertility, pregnancy and lactation

The medicinal product is indicated for use in toddlers and infants, therefore use during pregnancy and lactation is not applicable.

4.7 Effects on ability to drive and use machines

Calgel Teething Gel has no influence on the ability to drive and use machines.

4.8 Undesirable effects

When used according to instructions side effects would not be expected. However, isolated cases of hypersensitivity to lidocaine hydrochloride have been reported in adults and in a child over 12 years following local injection. Hypersensitivity presented in these cases as localised oedema with slight difficulty in breathing or as generalised rash.

Chamomile, a minor ingredient in the herbal flavouring agent, has been documented as causing allergic reactions. Hypersensitivity to chamomile normally manifests as breathing difficulties in atopic individuals. Anaphylactic reactions have been reported in individuals drinking herbal tea infusions containing chamomile (herbal tea asthma). Sensitised individuals may demonstrate positive skin reactions to preparations containing chamomile.

In the event of any unwanted side effects, use should be discontinued and a doctor consulted.

Post-marketing Data:

Adverse drug reactions (ADRs) identified during post-marketing experience with Cetylpyridinium/Lidocaine are included in Table 1. The frequencies are provided according to the following convention:

Very common ≥1/10

Common ≥1/100 and < 1/10

Uncommon ≥1/1,000 and <1/100

Rare ≥1/10,000, and <1/1,000

Very rare <1/10,000

Not known (cannot be estimated from the available data)

Table 1: Adverse Drug Reactions Identified During Post-Marketing Experience with Cetylpyridinium/Lidocaine Frequency Category Estimated from Clinical Trials or Epidemiology Studies	
SOC	
Frequency category	*Adverse Event Preferred Term*
Immune System Disorders	
Not known	*Hypersensitivity (including Dermatitis)*
General Disorders and Administration Site Conditions	
Not known	*Application site reactions (including Erythema)*

Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the Yellow Card Scheme at: www.mhra.gov.uk/yellowcard or search for MHRA Yellow Card in the Google Play or Apple App Store.

4.9 Overdose

Cetylpyridinium

Ingestion of cetylpyridinium in large doses may cause gastric upset and central nervous system depression. Concentrations where overdose symptoms were observed were 70 times higher than the concentrations of cetylpyridinium chloride found in this product.

Lidocaine

Systemic toxic effects with local anaesthetics (all forms of administration) may include central nervous system and cardiac effects.

No symptoms of overdosage have been identified from the analysis of post-marketing data for this product.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Anaesthetics, local (Amides) Lidocaine combinations
ATC code: N01 BB52

Established local anaesthetic (lidocaine) for topical application.

5.2 Pharmacokinetic properties

None stated.

5.3 Preclinical safety data

No additional information.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Sorbitol solution (70%) (E420)
Xylitol (E967)
Ethanol 96%
Glycerol
Hydroxyethyl cellulose 5000
Macrogolglycerol hydroxystearate (Cremophor RH 40) (castor oil polyoxyl hydrogenated)
Macrogol lauryl ether 9
Macrogol 300
Saccharin sodium
Levomenthol
Pharmaceutical liquid flavour, (containing chamomile, benzyl alcohol, and benzoic acid (E210))
Caramel (E150, containing sugars)
Citric acid monohydrate
Sodium citrate dihydrate
Purified water

6.2 Incompatibilities

None known

6.3 Shelf life

3 years (unopened)

6.4 Special precautions for storage

Do not store above 25°C.

6.5 Nature and contents of container

10 g collapsible, internally lacquered, aluminium tube, the nozzle of which possesses a membrane.

6.6 Special precautions for disposal

No special requirements for disposal

7. MARKETING AUTHORIZATION HOLDER

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8. MARKETING AUTHORIZATION NUMBER

PL 15513/0015

9. DATE OF FIRST AUTHORIZATION/RENEWAL OF THE AUTHORIZATION

04.06.99

10. DATE OF REVISION OF THE TEXT

11 April 2023