

SAFETY DATA SHEET

Section 1: Identification

Product identifier Cat ELC Advanced (Extended Life Coolant)

Other means of identification

Product code 1804234

Recommended use of the chemical and restrictions on use

Recommended use Antifreeze / Coolant.

Restrictions on use Uses other than the recommended use.

Details of manufacturer or importer

Supplier ARTECO NV
Metropoolstraat 25
B-2900 Schoten (Antwerpen)
Belgium

e-mail orders@arteco-coolants.com

Product information +32 (0) 9 397 06 00

Emergency telephone number

Transportation emergency Europe: +44 20 35147487 (24hr) Access code: 335087

Health Emergency Europe: +44 20 35147487 (24hr) Access code: 335087

Section 2: Hazard identification

Classification of the hazardous chemical

Physical hazards Not classified.

Health hazards Specific target organ toxicity - repeated exposure Category 2 (kidney)

Environmental hazards Not classified.

Label elements, including precautionary statements

Hazard symbol(s)



Health hazard

Signal word Warning

Hazard statement(s) May cause damage to organs (kidney) through prolonged or repeated exposure.

Precautionary statement(s)

Prevention Keep out of reach of children. Do not breathe mist/vapours.

Response If medical advice is needed, have product container or label at hand. IF SWALLOWED: Immediately call a POISON CENTRE/doctor.

Storage Not assigned.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards which do not result in classification None.

Supplemental information None.

Section 3: Composition/information on ingredients

Substance or mixture Mixture

Chemical property	CAS Number	Concentration (%)
Ethylene glycol	107-21-1	34 - < 80
Sodium benzoate	532-32-1	0.1 - < 3

Composition comments All concentrations are in percent by weight.

This product contains a bittering agent.

Section 4: First-aid measures

Description of necessary first aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.
Personal protection for first-aid responders	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
Symptoms caused by exposure	Convulsions. Dizziness. Nausea, vomiting. Abdominal pain. Oedema. Prolonged exposure may cause chronic effects.
Medical attention and special treatment	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

Section 5: Fire-fighting measures

Extinguishing media	Alcohol resistant foam. Powder. Carbon dioxide (CO2).
Extinguishing media to avoid	Do not use water jet as an extinguisher, as this will spread the fire.
HAZCHEM Code Number	None.
Specific hazards during fire fighting	Thermal decomposition may produce smoke, oxides of carbon and lower molecular weight organic compounds whose composition have not been characterised.
Special fire fighting procedures	Move containers from fire area if you can do so without risk.
Protection of fire-fighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Hazards from combustion products	None.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapours. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see Section 8 of the SDS.
For emergency responders	Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
Methods and materials for containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Absorb spillage with suitable absorbent material. Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Section 7: Handling and storage

Precautions for safe handling	Do not breathe mist/vapours. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in tightly closed container. Store away from incompatible materials (see section 10 of the SDS).

Section 8: Exposure controls/personal protection

Control parameters	Follow standard monitoring procedures.
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Occupational exposure limits

New Zealand. OELs (Workplace Exposure Standards and Biological Exposure Indices)

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	Ceiling	127 mg/m3	Vapor and mist.

New Zealand. OELs (Workplace Exposure Standards and Biological Exposure Indices)

Components	Type	Value	Form
		50 ppm	Vapor and mist.
US. ACGIH Threshold Limit Values (TLV)			
Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	STEL	10 mg/m3	Aerosol, inhalable.
	TWA	50 ppm	Vapor fraction
		25 ppm	Vapor fraction
Sodium benzoate (CAS 532-32-1)	TWA	2.5 mg/m3	Inhalable fraction.
UK. OELs. Workplace Exposure Limits (WELs) (EH40/2005 (Fourth Edition 2020)), Table 1			
Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m3	Vapour.
	TWA	40 ppm	Vapour.
		52 mg/m3	Vapour.
		10 mg/m3	Particulate.
		20 ppm	Vapour.
Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)			
Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m3	Vapour.
	TWA	40 ppm	Vapour.
		52 mg/m3	Vapour.
		10 mg/m3	Particulate.
		20 ppm	Vapour.

Biological limit values No biological exposure limits noted for the ingredient(s).

Exposure guidelines

US ACGIH Threshold Limit Values: Skin designation

Sodium benzoate (CAS 532-32-1)

Danger of cutaneous absorption

Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, for example personal protective equipment (PPE)

Eye/face protection

Chemical respirator with organic vapour cartridge and full facepiece.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. Neoprene, butyl rubber, nitrile or Viton gloves are recommended. Full contact: Use gloves classified protection index 6 with breakthrough time of 480 minutes. Minimum glove thickness 0.38 mm.

Other

Wash hands thoroughly after handling. Use of an impervious apron is recommended.

Respiratory protection

Chemical respirator with organic vapour cartridge and full facepiece.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

Hygiene measures

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Section 9: Physical and chemical properties

Appearance

Physical state

Liquid.

Form

Slightly hazy liquid.

Colour

Red.

Odour

Mild.

Odour threshold

Not determined.

pH	> 7.9 - < 8.6 (20°C)
Melting point/freezing point	Not applicable. / ≤ -37 °C (≤ -34.6 °F)
Initial boiling point and boiling range	109 °C (228.2 °F) (Estimated)
Flash point	Does not flash.
Evaporation rate	Not determined.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not determined.
Explosive limit – upper (%)	Not determined.
Vapour pressure	Not determined.
Vapour density	Not determined.
Relative density	Not determined.
Solubility(ies)	
Solubility (water)	Miscible.
Partition coefficient (n-octanol/water)	Not applicable, product is a mixture.
Auto-ignition temperature	398 °C (748.4 °F) (Ethylene glycol)
Decomposition temperature	Not determined.
Kinematic viscosity	Not determined.
Other physical and chemical parameters	
Density	1.072 - 1.075 kg/l (20 °C (68 °F))
Explosive properties	Not explosive.
Molecular weight	Not applicable, product is a mixture.
Viscosity	Not determined.

Section 10: Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong acids. Strong oxidising agents. Nitrates. Peroxides. Chlorates.
Hazardous decomposition products	At elevated temperatures: Ketones. Aldehydes.

Section 11: Toxicological information

Information on likely routes of exposure

Inhalation	In high concentrations, mists/vapours may irritate throat and respiratory system and cause coughing.
Skin contact	Prolonged or repeated contact may dry skin and cause irritation.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Ingestion of ethylene glycol may result in nausea, vomiting, abdominal cramps, blindness, liver damage, irritation, reproductive effects, nerve damage, convulsions, oedema of the lung, cardiopulmonary effects (metabolic acidosis), pneumonia and kidney failure which could result in death. The single lethal dose for humans is about 100 ml. Inhalation of high levels of vapour or mists for prolonged periods of time may also result in toxic effects.

Symptoms related to the physical, chemical and toxicological characteristics	Convulsions. Dizziness. Nausea, vomiting. Abdominal pain. Oedema. Prolonged exposure may cause chronic effects.
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Information on toxicological effects

Acute toxicity

Product	Species	Test Results
Cat ELC Advanced (Extended Life Coolant) (CAS -)		
Acute		
Dermal		
ATEmix		20940000 mg/kg bw
Oral		
ATEmix		3237 mg/kg bw
Components	Species	Test Results
Ethylene glycol (CAS 107-21-1)		
Acute		
Dermal		
LD50	Mouse	> 3500 mg/kg
Inhalation		
<i>Aerosol</i>		
LC50	Rat	> 2.5 mg/l, 6 Hours
Oral		
LD50	Cat	1600 mg/kg
Sodium benzoate (CAS 532-32-1)		
Acute		
Oral		
LD50	Rat	3450 mg/kg
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.	
Respiratory irritation	In high concentrations, mists/vapours may irritate throat and respiratory system and cause coughing.	
Respiratory or skin sensitisation		
Respiratory sensitisation	Not a respiratory sensitiser.	
Skin sensitisation	This product is not expected to cause skin sensitisation.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Not classifiable as to carcinogenicity to humans.	
ACGIH Carcinogens		
Ethylene glycol (CAS 107-21-1)	A4 Not classifiable as a human carcinogen.	
Sodium benzoate (CAS 532-32-1)	Not suspected as a human carcinogen. A5	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Not listed.		
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	May cause damage to organs (kidney) through prolonged or repeated exposure.	
Aspiration hazard	Not an aspiration hazard.	
Narcotic effects	None known.	
Section 12: Ecological information		
Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.	
Components	Species	Test Results
Ethylene glycol (CAS 107-21-1)		
Aquatic		
Crustacea	EC50	Daphnia magna > 100 mg/l, 48 Hours
<i>Acute</i>		
Fish	LC50	Fathead minnow (Pimephales promelas) 72860 mg/l, 96 hours
Persistence and degradability	Ethylene glycol: >90% / 10 days (OECD 301A) Readily biodegradable.	
Bioaccumulative potential		

**Partition coefficient
n-octanol / water (log K_{ow})**

Ethylene glycol (CAS 107-21-1)	-1.36
Sodium benzoate (CAS 532-32-1)	-2.27

Mobility in soil This product is miscible in water and may not disperse in soil.

Other adverse effects No data available.

Section 13: Disposal considerations

Disposal methods Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Special precautions to be taken during disposal Dispose in accordance with all applicable regulations.

Method of disposal that should not be used None known.

Section 14: Transport information

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

Section 15: Regulatory information

Applicable regulations HSNO - Lubricants, Lubricant Additives, Coolants and Anti-freeze Agents (Subsidiary Hazard) Group Standard 2020 [HSR002606]

New Zealand Inventory of Chemicals (NZIoC): Registration status

Ethylene glycol (CAS 107-21-1)	HSNO Approved
Sodium benzoate (CAS 532-32-1)	Non-hazardous

Section 16: Other information

References ECHA CHEM

Issued by

Company name Arteco NV

Prepared by

Title Arteco NV

Disclaimer

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