

1. Product and company identification

Product identifier

Trade name: 635L2 - Special Lacquer, colorless

Recommended use and restrictions on use

General use: Varnish for orthopedic procedures.
Reserved for industrial and professional use.

Initial supplier identifier

Company name: Otto Bock HealthCare Canada Ltd.

Street/POB-No.: 5470 Harvester Road

Postal Code, city: Burlington, ON L7L 5N5, CA
Canada

WWW: www.ottobock.ca

E-mail: info.canada@ottobock.com

Telephone: (800) 665-3327

Telefax: (800) 463-3659

Department responsible for information:

Mark Agro, Telephone: (800) 665-3327 (9 am - 5 pm)

Additional information:

Corporate headquarters:
Ottobock SE & Co. KGaA
Max-Näder-Straße 15
Duderstadt
Germany

Emergency phone number

COLLECT, Telephone: (613) 996-6666

Transport:

CONSULTANK Lutz Harder GmbH (Contract QUALI003)

Telephone: +49 (0)178-4337434 (from USA: 01149 178 4337434)

2. Hazards identification

Emergency overview

Appearance: Physical state at 20 °C and 101.3 kPa: liquid

Color: colorless

Odor: type specific

Classification: Flammable Liquid 2. Skin Irritation 2. Eye Irritation 2A. Reproductive toxicity 2.
Specific Target Organ Toxicity (Single Exposure) 3.
Specific Target Organ Toxicity (Repeated Exposure) 2. Aquatic toxicity - chronic 3.

Hazard symbols:



Signal word: **Danger**

Hazard statements:

- Highly flammable liquid and vapor.
- Causes skin irritation.
- Causes serious eye irritation.
- May cause drowsiness or dizziness.
- Suspected of damaging the unborn child.
- May cause damage to organs through prolonged or repeated exposure.
- Harmful to aquatic life with long lasting effects.

Precautionary statements:

- Obtain special instructions before use.
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Do not breathe mist/vapors/spray.
- Wear protective gloves/protective clothing/eye protection/face protection.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Call a POISON CENTER/doctor if you feel unwell.
- Store in a well-ventilated place. Keep container tightly closed.

Regulatory status

This material is considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) and WHMIS in Canada.

Hazards not otherwise classified

- Potentially explosive mixtures may form if adequate ventilation is not provided.
- Inhaling can lead to irritations of the respiratory tract and mucous membrane.
- Higher doses may lead to a narcotic effect.
- Special danger of slipping by leaking/spilling product.

see section 11: Toxicological information

3. Composition / Information on ingredients

Relevant ingredients:

CAS No.	Designation	Concentration	Classification
CAS 123-86-4	n-Butyl acetate	25 - 50 %	Flammable Liquid 3. Specific Target Organ Toxicity (Single Exposure) 3.
CAS 141-78-6	Ethyl acetate	10 - 25 %	Flammable Liquid 2. Eye Irritation 2A. Specific Target Organ Toxicity (Single Exposure) 3.
CAS 9004-70-0	Nitrocellulose	10 - 25 %	Flammable Solid 1.
CAS 108-88-3	Toluene	10 - 25 %	Flammable Liquid 2. Skin Irritation 2. Eye Irritation 2A. Reproductive toxicity 2. Specific Target Organ Toxicity (Single Exposure) 3. Specific Target Organ Toxicity (Repeated Exposure) 2. Aspiration Toxicity 1. Aquatic toxicity - chronic 3.
CAS 67-64-1	Acetone	5 - 10 %	Flammable Liquid 2. Eye Irritation 2A. Specific Target Organ Toxicity (Single Exposure) 3.
CAS 67-63-0	Isopropyl alcohol	5 - 10 %	Flammable Liquid 2. Eye Irritation 2A. Specific Target Organ Toxicity (Single Exposure) 3.
CAS 107-98-2	1-Methoxy-2-propanol	5 - 10 %	Flammable Liquid 3. Specific Target Organ Toxicity (Single Exposure) 3.
CAS 64742-49-0	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	0.5 - 2.5 %	Flammable Liquid 2. Skin Irritation 2. Specific Target Organ Toxicity (Single Exposure) 3. Aspiration Toxicity 1. Aquatic toxicity - chronic 2.

4. First aid measures

General information:	Obtain special instructions before use. If medical advice is needed, have product container or label at hand. First aider: Pay attention to self-protection!
In case of inhalation:	Move victim to fresh air, put at rest and loosen restrictive clothing. Do not allow victim to become chilled. Keep victim warm. If breathing becomes irregular or ceases, apply rescue breathing or artificial respiration immediately, where required supply oxygen. Seek medical attention. If victim is at risk of losing consciousness, position and transport on their side.
Following skin contact:	Thoroughly wash skin with soap and water. Do not use solvents or thinners. Take off immediately all contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.
After eye contact:	Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Subsequently consult an ophthalmologist.
After swallowing:	Rinse mouth immediately and drink plenty of water. Do not induce vomiting. Consult physician immediately. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Causes serious eye irritation. Causes skin irritation. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure.

Information to physician

Treat symptomatically.

5. Fire fighting measures

Flash point/flash point range:

-18 °C

Auto-ignition temperature: not self-igniting

Suitable extinguishing media:

Water spray jet, extinguishing powder, carbon dioxide.

In case of large fires: water spray jet or alcohol resistant foam.

Extinguishing media which must not be used for safety reasons:

Full water jet

Specific hazards arising from the chemical

Highly flammable liquid and vapor. Air combined with vapors may form potentially explosive mixtures that are heavier than air.

Vapors may proceed on the ground over great distances and cause fire and backflashes.

Exposure to fire produces thick, black smoke that is hazardous to health.

In case of fire may be liberated: Nitrogen oxides, smoke, carbon dioxide, carbon monoxide.

Special protective equipment and precautions for fire-fighters:

Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing.

Additional information:

Do not allow fire water to penetrate into surface or ground water. Heating will lead to pressure increase: Danger of bursting and explosion. Use fine water spray to cool endangered containers.

Keep containers cool with water spray.

In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.

6. Accidental release measures

Personal precautions:

Remove all sources of ignition. Keep unprotected people away. Wear appropriate protective equipment. Do not breathe mist/vapors/spray. Provide adequate ventilation. Avoid contact with the substance.

Take off immediately all contaminated clothing and wash it before reuse.

Cordon off downwind area at risk and warn inhabitants. Avoid exposure.

Environmental precautions:

Do not allow to enter soil, sewage, water bodies, lower level rooms or pits. If necessary, notify appropriate authorities.

Methods for clean-up:

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents) and place in closed containers for disposal.

Additional information:

Use explosion-proof equipment and non-sparking tools/utensils.

Special danger of slipping by leaking/spilling product.

7. Handling and storage

Handling

Advices on safe handling: Obtain special instructions before use. Provide adequate ventilation, and local exhaust as needed.

Avoid contact with skin and eyes. When using do not eat or drink.

Do not breathe mist/vapors/spray. Wash hands thoroughly after handling.

Take off immediately all contaminated clothing and wash it before reuse.

Guarantee sufficient ventilation during and after use, in order to prevent vapour accumulation.

Work place should be equipped with a shower and an eye rinsing apparatus.

Precautions against fire and explosion:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Take precautionary measures against static discharge. Use explosion-proof electrical/ventilating/lighting equipment. Do not weld.

In partially filled containers explosive mixtures may form.

Storage

Requirements for storerooms and containers:

Keep container tightly closed in a cool, well-ventilated place.

Keep container dry. Protect from heat and direct sunlight.

Hints on joint storage:

Keep away from strong acids and bases as well as oxidizing agents.

Keep away from food, drink and animal feedingstuffs.

Further details:

Store carefully closed containers upright to prevent any leaks.

Only trained personnel may be allowed to enter storage area.

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
123-86-4	n-Butyl acetate	Canada: OEL 15 min	950 mg/m ³ ; 200 ppm
		Canada: OEL 8 hour	713 mg/m ³ ; 150 ppm
		Canada: OEL STEL	150 ppm
		Canada: OEL TWA	50 ppm
		Canada: VECD	150 ppm
		Canada: VEMP	50 ppm
		USA: ACGIH: STEL	150 ppm
		USA: ACGIH: TWA	50 ppm
		USA: IDLH: TWA	1,700 ppm
		USA: NIOSH: STEL	950 mg/m ³ ; 200 ppm
		USA: NIOSH: TWA	710 mg/m ³ ; 150 ppm
		USA: OSHA: TWA	710 mg/m ³ ; 150 ppm
141-78-6	Ethyl acetate	Canada: OEL 8 hour	1,440 mg/m ³ ; 400 ppm
		Canada: OEL TWA	150 ppm
		Canada: VEMP	1,440 mg/m ³ ; 400 ppm
		USA: ACGIH: TWA	1,440 mg/m ³ ; 400 ppm
		USA: IDLH: TWA	2,000 ppm [10% LEL]
		USA: NIOSH: TWA	1,400 mg/m ³ ; 400 ppm
		USA: OSHA: TWA	1,400 mg/m ³ ; 400 ppm
108-88-3	Toluene	Canada: OEL 8 hour	188 mg/m ³ ; 50 ppm (may be absorbed through the skin)
		Canada: OEL TWA	20 ppm
		Canada: VEMP	20 ppm
		USA: ACGIH: TWA	20 ppm
		USA: IDLH: TWA	500 ppm
		USA: NIOSH: STEL	560 mg/m ³ ; 150 ppm
		USA: NIOSH: TWA	375 mg/m ³ ; 100 ppm
		USA: OSHA: Ceiling	500 ppm
		USA: OSHA: STEL	300 ppm
		USA: OSHA: TWA	200 ppm
67-64-1	Acetone	Canada: OEL 15 min	1,800 mg/m ³ ; 750 ppm
		Canada: OEL 8 hour	1,200 mg/m ³ ; 500 ppm
		Canada: OEL STEL	500 ppm
		Canada: OEL TWA	250 ppm
		Canada: VECD	500 ppm
		Canada: VEMP	250 ppm
		USA: ACGIH: STEL	500 ppm
		USA: ACGIH: TWA	250 ppm
		USA: IDLH: TWA	2,500 ppm
		USA: NIOSH: TWA	590 mg/m ³ ; 250 ppm
		USA: OSHA: TWA	2,400 mg/m ³ ; 1,000 ppm

CAS No.	Designation	Type	Limit value
67-63-0	Isopropyl alcohol	Canada: OEL 15 min	984 mg/m ³ ; 400 ppm
		Canada: OEL 8 hour	492 mg/m ³ ; 200 ppm
		Canada: OEL STEL	400 ppm
		Canada: OEL TWA	200 ppm
		Canada: VECD	400 ppm
		Canada: VEMP	200 ppm
		USA: ACGIH: STEL	984 mg/m ³ ; 400 ppm
		USA: ACGIH: TWA	492 mg/m ³ ; 200 ppm
		USA: IDLH: TWA	2,000 ppm [10% LEL]
		USA: NIOSH: STEL	1,225 mg/m ³ ; 500 ppm
		USA: NIOSH: TWA	980 mg/m ³ ; 400 ppm
		USA: OSHA: TWA	980 mg/m ³ ; 400 ppm
107-98-2	1-Methoxy-2-propanol	Canada: OEL 15 min	553 mg/m ³ ; 150 ppm
		Canada: OEL 8 hour	369 mg/m ³ ; 100 ppm
		Canada: OEL STEL	100 ppm
		Canada: OEL TWA	50 ppm
		Canada: VECD	100 mg/m ³
		Canada: VEMP	50 mg/m ³
		USA: ACGIH: STEL	369 mg/m ³ ; 100 ppm
		USA: ACGIH: TWA	184 mg/m ³ ; 50 ppm
		USA: NIOSH: STEL	540 mg/m ³ ; 150 ppm
		USA: NIOSH: TWA	360 mg/m ³ ; 100 ppm
64742-49-0	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Canada: OEL TWA	100 ppm

Biological limit values:

CAS No.	Designation	Type	Limit value	Parameter	Sampling
108-88-3	Toluene	USA: ACGIH-BEI, blood	0.02 mg/L	Toluene in blood	Prior to last shift of workweek
		USA: ACGIH-BEI, urine	0.03 mg/L	Toluene in urine	end of exposure or end of shift
		USA: ACGIH-BEI, urine	0.3 mg/g creatinine	o-Cresol in urine	end of exposure or end of shift
		USA: ACGIH-BEI, urine	25 mg/L	acetone	end of exposure or end of shift
67-64-1	Acetone	USA: ACGIH-BEI, urine	40 mg/L	Acetone in urine	end of shift at end of work week

Engineering controls

Use only explosion-protected equipment/instruments. Explosion protection required.
See also information in chapter 7, section storage.

Personal protection equipment (PPE)

Eye/face protection: Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.

Skin protection: Flame retardant, antistatic and chemical resistant protective clothing.

Protective gloves according to OSHA Standard - 29 CFR: 1910.138.

Glove material: Fluororubber (Viton)

Unsuitable materials:

Leather gloves/Protective gloves made of fabric.

Breakthrough time: > 15 min.

Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Respiratory protection: For short or minimal exposure: respiratory filter; in cases of longer exposure: supplied air respirator.

The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product.

General hygiene considerations:

Obtain special instructions before use. Keep away from sources of ignition - No smoking. When using do not eat or drink.

Wash hands before breaks and after work. Contaminated work clothing should not be allowed out of the workplace.

Avoid contact with skin and eyes. Do not breathe mist/vapors/spray.

Work place should be equipped with a shower and an eye rinsing apparatus.

Environmental exposure controls

Do not allow to enter into ground-water, surface water or drains.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance: Physical state at 20 °C and 101.3 kPa: liquid
Color: colorless

Odor: type specific

Odor threshold: No data available

pH: No data available

Melting point/freezing point: No data available

Initial boiling point and boiling range: 55.8 - 56.6 °C

Flash point/flash point range: -18 °C

Evaporation rate: No data available

Flammability: Highly flammable liquid and vapor.

Explosion limits: LEL (Lower Explosion Limit): 1.20 Vol-%

UEL (Upper Explosive Limit): 11.50 Vol-%

Vapor pressure: at 20 °C: 97 hPa

Vapor density: No data available

Density: at 20 °C: 0.94 g/mL

Water solubility: slightly miscible up to immiscible

Partition coefficient: n-octanol/water: No data available

Auto-ignition temperature: not self-igniting

Thermal decomposition: No data available

Viscosity, kinematic: at 20 °C: 50 s (ISO 2431, 4mm)

Explosive properties: Product is not explosive.

Vapors may form explosive mixtures with air.

Ignition temperature: 270 °C

Solvent content: 75.5 %
Water content: 0.4 %

10. Stability and reactivity

Reactivity: Highly flammable liquid and vapor. Vapors may form explosive mixtures with air.

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: Heating will lead to pressure increase: Danger of bursting and explosion.

Conditions to avoid: Keep away from heat sources, sparks and open flames.
Protect from direct sunlight.

Incompatible materials: Strong acid or bases as well as oxidizing agents.

Hazardous decomposition products: No hazardous decomposition products when regulations for storage and handling are observed.

Thermal decomposition: No data available

11. Toxicological information

Toxicological tests

Toxicological effects: Acute toxicity (oral): Based on available data, the classification criteria are not met.
Acute toxicity (dermal): Based on available data, the classification criteria are not met.
Acute toxicity (inhalative): Based on available data, the classification criteria are not met.
Skin corrosion/irritation: Skin Irritation 2 = Causes skin irritation.
Serious eye damage/irritation: Eye Irritation 2A = Causes serious eye irritation.
Sensitisation to the respiratory tract: Based on available data, the classification criteria are not met.
Skin sensitisation: Based on available data, the classification criteria are not met.
Germ cell mutagenicity/Genotoxicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: Reproductive toxicity 2 = Suspected of damaging the unborn child.
Effects on or via lactation: Lack of data.
Specific target organ toxicity (single exposure): Specific Target Organ Toxicity (Single Exposure) 3 = May cause drowsiness or dizziness.
Specific target organ toxicity (repeated exposure): Specific Target Organ Toxicity (Repeated Exposure) 2 = May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard: Based on available data, the classification criteria are not met.

Other information:

Information about Toluene:
 LD50 Rat, oral: > 5,000 mg/kg
 LD50 Rabbit, dermal: > 5,000 mg/kg
 LC50 Rat, inhalative: > 20 mg/L/4h
 IARC - Classification code: group 3
 OSHA - Carcinogen: not listed ingredient
 NTP - classification: not listed ingredient

Information about Isopropyl alcohol:
 IARC - Classification code: group 3
 OSHA - Carcinogen: not listed ingredient
 NTP - classification: not listed ingredient

Symptoms

Inhaling can lead to irritations of the respiratory tract and mucous membrane.
 Higher doses may lead to a narcotic effect.
 After eye contact: Upon direct contact with eyes may cause burning, tearing, redness.

12. Ecological information

Ecotoxicity

Aquatic toxicity: Harmful to aquatic life with long lasting effects.

Information about Naphtha (petroleum), hydrotreated light:
 Fish toxicity:
 LC50 Oncorhynchus mykiss: 8,41 mg/L/96h (OECD 203).
 Daphnia toxicity:
 EC50 Daphnia magna (Big water flea): 4,7 mg/L/48h (OECD 202).
 Algae toxicity:
 EC50 Pseudokirchneriella subcapitata (green algae): 12,4 mg/L/72h (OECD 201).

Mobility in soil

No data available

Persistence and degradability

Further details: No data available

Additional ecological information

Volatile organic compounds (VOC):
 75.48 % by weight / 709.5 g/L

General information:
 Do not allow to enter into ground-water, surface water or drains.
 Avoid spills and leaks. Very small amounts contaminates drinking water.

13. Disposal considerations

Product

Recommendation:
 Dispose of waste according to applicable legislation.
 Do not dispose of with household waste.
 Do not empty into drains.

Package

Recommendation: Dispose of waste according to applicable legislation.
Handle contaminated packages in the same way as the substance itself.
Non-contaminated packages may be recycled.
Handle empty containers with care. Incineration may cause explosion.

14. Transport information

UN number

ADR/RID, IMDG, IATA-DGR:

UN 1263

UN proper shipping name

ADR/RID, IMDG, IATA-DGR:

UN 1263, PAINT

Transport hazard class(es)

ADR/RID: Class 3, Code: F1

IMDG: Class 3, Subrisk -

IATA-DGR: Class 3



Packing group

ADR/RID, IMDG, IATA-DGR:

II

Environmental hazards

Marine pollutant: no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

USA: Department of Transportation (DOT)

Identification number: UN1263
Proper shipping name: UN 1263, PAINT
Hazard class or Division: 3
Packing Group: II
Labels: 3
Special Provisions: 149, 367, 383, B52, B131, IB2, T4, TP1, TP8, TP28
Packaging – Exceptions: 150
Packaging – Non-bulk: 173
Packaging – Bulk: 242
Quantity limitations – Passenger aircraft / rail: 5 L
Quantity limitations – Cargo only: 60 L
Vessel stowage – Location: B



Canada: Transportation of Dangerous Goods (TDG)

UN Number: UN1263
 Shipping name: UN 1263, Paint
 TDG class: 3
 Packing group: II
 Special provisions: 59, 142
 Explosive limit and limited quantity index: 5L
 Passenger carrying road or rail index: 5L

Sea transport (IMDG)

UN number: UN 1263
 Proper shipping name: UN 1263, PAINT
 Class or division, Subsidiary risk: Class 3, Subrisk -
 Packing Group: II
 EmS: F-E, S-E
 Special Provisions: 163 367
 Limited quantities: 5 L
 Excepted quantities: E2
 Package - Instructions: P001
 Package - Provisions: PP1
 IBC - Instructions: IBC02
 IBC - Provisions: -
 Tank instructions - IMO: -
 Tank instructions - UN: T4
 Tank instructions - Provisions: TP1, TP8, TP28
 Stowage and handling: Category B.
 Properties and observations: Miscibility with water depends upon the composition.
 Marine pollutant: no
 Segregation group: none
 Remarks: UN1263, PAINT

Air transport (IATA)

UN/ID number: UN 1263
 Proper shipping name: UN 1263, PAINT
 Class or division, Subsidiary risk: Class 3
 Packing Group: II
 Hazard label: Flamm. liquid
 Excepted Quantity Code: E2
 Passenger and Cargo Aircraft: Ltd.Qty.: Pack.Instr. Y341 - Max. Net Qty/Pkg. 1 L
 Passenger and Cargo Aircraft: Pack.Instr. 353 - Max. Net Qty/Pkg. 5 L
 Cargo Aircraft only: Pack.Instr. 364 - Max. Net Qty/Pkg. 60 L
 Special Provisions: A3 A72 A192
 Emergency Response Guide-Code (ERG): 3L
 Remarks: UN1263, PAINT

15. Regulatory information

National regulations - Canada

n-Butyl acetate:	DSL: listed
Ethyl acetate:	DSL: listed
Nitrocellulose:	DSL: listed
Toluene:	DSL: listed
Acetone:	DSL: listed
Isopropyl alcohol:	DSL: listed
1-Methoxy-2-propanol:	DSL: listed
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics:	DSL: listed

National regulations - U.S. Federal Regulations

n-Butyl acetate:

TSCA Inventory: listed

Clean Water Act:

CWA Hazardous Substances: RQ 5000 lbs.

Other Environmental Laws:

CERCLA: RQ 5000 lbs.

NIOSH Recommendations:

Occupational Health Guideline: 0072

Ethyl acetate:

TSCA Inventory: listed

Other Environmental Laws:

CERCLA: RQ 5000 lbs.

RCRA Hazardous Wastes: Code U112

NIOSH Recommendations:

Occupational Health Guideline: 0260

Nitrocellulose:

TSCA Inventory: listed

OSHA Process Safety Management: Threshold 02500 lbs.

Toluene:

TSCA Inventory: listed

Carcinogen Status:

IARC Rating: Group 3

OSHA Carcinogen: not listed

NTP Rating: not listed

Clean Air Act:

CAA Hazardous Air Pollutants: yes

CAA SOCM Chemical: yes

Clean Water Act:

CWA Hazardous Substances: RQ 1000 lbs.

CWA Priority Pollutants: yes

Other Environmental Laws:

CERCLA: RQ 1000 lbs.

RCRA Hazardous Wastes: Code U220

RCRA Groundwater Monitoring: Methods 8020, 8240 / PQL 2, 5

SARA Title III - Section 313, Toxic Release: Conc. 1.0% / Threshold Standard

NIOSH Recommendations:

Occupational Health Guideline: 0619

Acetone:

TSCA Inventory: listed

Clean Air Act:

CAA SOCM Chemical: yes

Other Environmental Laws:

CERCLA: RQ 5000 lbs.

RCRA Hazardous Wastes: Code U002

RCRA Groundwater Monitoring: Methods 8240 / PQL 100

NIOSH Recommendations:

Occupational Health Guideline: 0004*

Isopropyl alcohol:

TSCA Inventory: listed

Carcinogen Status:

IARC Rating: Group 3

OSHA Carcinogen: not listed

NTP Rating: not listed

NIOSH Recommendations:

Occupational Health Guideline: 0359

1-Methoxy-2-propanol:

TSCA Inventory: listed

Clean Air Act:

CAA SOCM I Chemical: yes

NIOSH Recommendations:

Occupational Health Guideline: 0536

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics:

TSCA Inventory: listed; UVCB

National regulations - U.S. State Regulations

n-Butyl acetate:	<p>CAS# 123-86-4 can be found on the following state right to know lists:</p> <ul style="list-style-type: none"> - California, Massachusetts, Minnesota, New Jersey, Pennsylvania.
Ethyl acetate:	<p>Delaware Air Quality Management List:</p> <p>DRQ: 5000 - RQ State: Federal Regulations Apply</p> <p>Idaho Air Pollutant List:</p> <p>Title 585: AAC: 70 - EL: 93,3 - OEL: 1400 - Title 586: -</p> <p>Main Hazardous Air Pollutants:</p> <p>Me 2005: HAP - Hap Rpt: 20000</p> <p>Massachusetts Haz. Substance codes: 2,4,5,6 F8</p> <p>Minnesota Haz. Substance:</p> <p>Codes: AO - Ratings: 6.83 - Status: Title III.</p> <p>New York List of Hazardous Substances:</p> <p>RQ-Air: 5000 - RQ-Land: 1 - Note: No Note Associated with this chemical.</p> <p>Pennsylvania Haz. Substance code: E</p> <p>Washington Air Contaminant:</p> <p>TWA: 400 ppm - 1400 mg</p>
Nitrocellulose:	<p>California Proposition 65 code: -</p> <p>Delaware Air Quality Management List:</p> <p>DRQ: 500 - RQ State: State requirement differs from Federal</p> <p>Massachusetts Haz. Substance codes: 5,6</p> <p>New Jersey RTK Hazardous Substance:</p> <p>DOT: 0340 - Sub No.: 3642 - TPQ: -</p> <p>Pennsylvania Haz. Substance code: -</p>
Toluene:	<p>California Proposition 65: developmental</p> <p>California Proposition 65 code: D</p> <p>Delaware Air Quality Management List:</p> <p>DRQ: 1000 - RQ State: Federal Regulations Apply</p> <p>Idaho Air Pollutant List:</p> <p>Title 585: AAC: 18.75 - EL: 25 - OEL: 375 - Title 586: -</p> <p>Maine Hazardous Air Pollutants:</p> <p>Me 2005: HAP - Hap Rpt: 2000</p> <p>Massachusetts Haz. Substance codes: 2,4,5,6 F7 F8 F9</p> <p>Michigan Critical Material:</p> <p>Note: - - CMR: 32 - Parameter: 00108-88-3 - Annual Usage Parameter: 100</p> <p>Minnesota Haz. Substance:</p> <p>Codes: ANO - Ratings: 8.64 - Status: Air Pollutant Title III. TRI. Water Pollutant</p> <p>New Jersey RTK Hazardous Substance:</p> <p>DOT: 1294 - Sub No.: 1866 - TPQ: -</p> <p>New York List of Hazardous Substances:</p> <p>RQ-Air: 1000 - RQ-Land: 1 - Note: No Note Associated with this chemical.</p> <p>Pennsylvania Haz. Substance code: E</p> <p>Washington Air Contaminant:</p> <p>TWA: 100 ppm - 375 mg - STEL: 150 ppm - 560 mg</p>

Acetone:	<p>California Prop 65 List: None</p> <p>Delaware Air Quality Management List: DRQ: 5000 - RQ State: Federal Regulations Apply</p> <p>Idaho Air Pollutant List: Title 585: AAC: 89 - EL: 119 - OEL: 1780</p> <p>Massachusetts Haz. Substance codes: 2,4,5,6 F8 F9</p> <p>Minnesota Haz. Substance: Codes: AON - Ratings: 7.16 - Status: Title III</p> <p>New York List of Hazardous Substances: RQ-Air: 5000 - RQ-Land: 1 - Note: No Note Associated with this chemical.</p> <p>Pennsylvania Haz. Substance code: E</p> <p>Washington Air Contaminant: TWA: 750 ppm - 1800 mg - STEL: 1000 ppm - 2400 mg</p>
Isopropyl alcohol:	<p>Idaho Air Pollutant List: Title 585: AAC: 49 -- EL: 65.3 -- WEL: 980 -Title 586: -</p> <p>Massachusetts Haz. Substance codes: 2,4,5,6 F9</p> <p>Minnesota Haz. Substance: Codes: ANO -- Ratings: 7.84 -- Status: Title III. TRI.</p> <p>New Jersey RTK Hazardous Substance: DOT: 1219 - Sub No.: 1076 - TPQ: -</p> <p>Pennsylvania Haz. Substance code: E</p> <p>Washington Air Contaminant: TWA: 400 ppm - 980 mg -- STEL: 500 ppm - 1225 mg</p>
1-Methoxy-2-propanol:	<p>Idaho Air Pollutant List: Title 585: AAC: 18 - EL: 24 - OEL: 360 - Title 586: -</p> <p>Massachusetts Haz. Substance codes: 4,6 F8</p> <p>Minnesota Haz. Substance: Codes: A - Ratings: 8.12 - Status: -</p> <p>Pennsylvania Haz. Substance code: -</p> <p>Washington Air Contaminant: TWA: 100 ppm - 360 mg - STEL: 150 ppm - 540 mg</p>

National regulations - EC member states

Further regulations, limitations and legal requirements:

Toluene:	<p>REGULATION (EC) 273/2004 (Drug precursors): Category 3</p> <p>REGULATION (EC) 111/2005 (Trade with drug precursors): Category 3</p>
Acetone:	<p>Regulation (EU) 2019/1148 (marketing and use of explosives precursors): listed</p> <p>REGULATION (EC) 273/2004 (Drug precursors): Category 3</p> <p>REGULATION (EC) 111/2005 (Trade with drug precursors): Category 3</p>
1-Methoxy-2-propanol:	<p>Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]: Physical hazards: Code P5c, Quantity threshold 5 000 000 kg / 50 000 000 kg</p>

16. Other information

Text for labeling:	<p>Contains 25 - 50 % n-Butyl acetate, 10 - 25 % Ethyl acetate, 10 - 25 % Nitrocellulose, 10 - 25 % Toluene, 5 - 10 % Acetone, 5 - 10 % Isopropyl alcohol, 5 - 10 % 1-Methoxy-2-propanol, 0.5 - 2.5 % Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics.</p> <p>Contains Toluene, n-Butyl acetate and Ethyl acetate.</p>
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Hazard rating systems:



NFPA Hazard Rating:

Health: 2 (Moderate)

Fire: 3 (Serious)

Reactivity: 0 (Minimal)

HMIS Version III Rating:

Health: 2 (Moderate) - Chronic effects

Flammability: 3 (Serious)

Physical Hazard: 0 (Minimal)

Personal Protection: X = Consult your supervisor

HEALTH	*	2
FLAMMABILITY		3
PHYSICAL HAZARD		0
		X

Abbreviations and acronyms:

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
 Aquatic toxicity - chronic: Hazardous to the aquatic environment - chronic
 AS/NZS: Australian Standards/New Zealand Standards
 Aspiration Toxicity: Aspiration toxicity
 CAS: Chemical Abstracts Service
 CFR: Code of Federal Regulations
 CLP: Classification, Labelling and Packaging
 DMEL: Derived minimal effect level
 DNEL: Derived no-effect level
 EC: European Community
 EC50: Effective Concentration 50%
 EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods
 EN: European Standard
 EQ: Excepted quantities
 EU: European Union
 Eye Irritation: Eye irritation
 Flammable Liquid: Flammable liquid
 Flammable Solid: Flammable solid
 IATA: International Air Transport Association
 IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
 IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
 IMDG Code: International Maritime Dangerous Goods Code
 IMO: International Maritime Organization
 LC50: Median lethal concentration
 LD50: Lethal dose 50%
 LEL: Lower Explosion Limit
 MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
 OSHA: Occupational Safety and Health Administration
 PBT: Persistent, bioaccumulative and toxic
 PNEC: Predicted no-effect concentration
 Reproductive toxicity: Reproductive toxicity
 RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
 Skin Irritation: Skin irritation
 STOT RE: Specific target organ toxicity - repeated exposure
 STOT SE: Specific target organ toxicity - single exposure
 TRGS: Technical Rules for Hazardous Substances
 UN: United Nations
 vPvB: Very persistent and very bioaccumulative
 WHMIS: Workplace Hazardous Materials Information System

Reason of change: Changes in section 8: Occupational exposure limit values

Date of first version: 13/11/1995

Department issuing data sheet

Contact person: see section 1: Department responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.