

1 Identification

Product identifier

Trade name: 635L8 - Socket Lacquer, clear

Recommended use and restrictions on use

General use: Varnish, coating agent, for orthopedic procedures
For commercial user only.

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

Email: 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 telephone number

COLLECT, Telephone: (613) 996-6666

Transport:

CONSULTANK Lutz Harder GmbH (Contract QUALI003)

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

2 Hazard identification

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 - acute 2

Aquatic toxicity - chronic 3

Highly flammable liquid and vapour.

Causes skin irritation.

Causes serious eye irritation.

Suspected of damaging the unborn child.

May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure.

Toxic to aquatic life.

Harmful to aquatic life with long lasting effects.

Information elements

Symbols:



Signal word:

Danger

Hazard statements:

Highly flammable liquid and vapour.
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.
Toxic to aquatic life.
Harmful to aquatic life with long lasting effects.

Precautionary statements:

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe vapours.
Wash hands and face thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection.

IF ON SKIN: Wash with plenty of water/soap.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/or shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/attention.
Call a POISON CENTER/doctor if you feel unwell.
Specific treatment (see 'First aid' on this label).
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
In case of fire: Use dry powder, foam or water spray for extinction.

Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.

Dispose of contents/container to hazardous or special waste collection point.

Other hazards known to the supplier with respect to the product

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

3 Composition/Information on ingredients

Mixture

Chemical name: Preparation with synthetic adhesive agent and solvent

Hazardous ingredients:

CAS No.	Designation	Content	Classification
CAS 108-88-3	Toluene	35 - 50 %	Flammable Liquid 2. Skin Irritation 2. Reproductive toxicity 2. Specific Target Organ Toxicity (Single Exposure) 3. Specific Target Organ Toxicity (Repeated Exposure) 2. Aspiration Toxicity 1. Aquatic toxicity - acute 2. Aquatic toxicity - chronic 3.
CAS 141-78-6	Ethyl acetate	15 - 20 %	Flammable Liquid 2. Eye Irritation 2A. Specific Target Organ Toxicity (Single Exposure) 3.

The actual concentration or concentration range is withheld as a trade secret.

4 First-aid measures

Description of necessary first-aid measures

General information:	If medical advice is needed, have product container or label at hand. First aider: Pay attention to self-protection! Take off immediately all contaminated clothing and wash it before reuse.
In case of inhalation:	Remove person to fresh air and keep comfortable for breathing. In case of irregular breathing or respiratory arrest provide artificial respiration. Seek medical attention if problems persist.
In case of swallowing:	Rinse mouth immediately and drink plenty of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention.
In case of skin contact:	Remove residues with soap and water. In case of skin reactions, consult a physician.
In case of 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.

Most important symptoms and effects, whether acute or delayed

Causes skin irritation and serious eye irritation.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.
Inhaling can lead to irritations of the respiratory tract and mucous membrane.

Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

5 Fire-fighting measures

Suitable and unsuitable extinguishing media

Suitable extinguishing media:

Water spray jet, alcohol resistant foam, extinguishing powder, carbon dioxide

Unsuitable extinguishing media:

Full water jet

Specific hazards arising from the product

Highly flammable liquid and vapour. vapours may proceed on the ground over great distances and cause fire and backflashes. In case of insufficient ventilation and/or when used, may form explosive/highly flammable vapour-air mixture.

May form dangerous gases and vapours in case of fire. Furthermore, there may develop: Carbon monoxide and carbon dioxide.

Special protective equipment and precautions for fire-fighters

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

Additional information:

Do not inhale explosion and combustion gases. Use fine water spray to cool endangered containers.

In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion. Do not allow fire water to penetrate into surface or ground water. 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, protective equipment and emergency procedures

Avoid exposure. Do not breathe vapours. Do not get in eyes, on skin, or on clothing. If possible, eliminate leakage. Provide adequate ventilation. Wear appropriate protective equipment. Take off immediately all contaminated clothing and wash it before reuse. Keep unprotected people away. Cordon off downwind area at risk and warn inhabitants.

Environmental precautions:

Do not allow to enter into ground-water, surface water or drains. In case of release, notify competent authorities. Danger of explosion!

Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13). Beware of reignition. Thoroughly clean surrounding area.

In case of greater quantities: Collect mechanically (use only explosion-proof equipment when pumping out). Never return spills in original containers for re-use.

Additional information:

Special danger of slipping by leaking/spilling product.

7 Handling and storage

Precautions for safe handling

Advices on safe handling: Obtain special instructions before use. Provide adequate ventilation, and local exhaust as needed. Do not breathe vapours. Do not get in eyes, on skin, or on clothing. Avoid contact during pregnancy/while nursing. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Wear appropriate protective equipment. Take off immediately all contaminated clothing and wash it before reuse. 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. Ground/bond container and receiving equipment. Take precautionary measures against static discharge. Use only explosion-protected equipment/instruments. In partially filled containers explosive mixtures may form.

Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep container tightly closed and in a well-ventilated place. Keep container dry. Keep only in the original container.

Protect from direct sunlight. Store containers in upright position.

Storage temperature: 5 - 35 °C

Only approved packaging (e.g. in accordance with TDG) may be used.

Hints on joint storage:

Keep away from food, drink and animal feedingstuffs.

Do not store together with: Strong acids, strong bases, strong oxidizing agents.

Further details:

Only trained personnel may be allowed to enter storage area.

8 Exposure controls/Personal protection

Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
108-88-3	Toluene	Canada: Alberta, OEL 8 hour	188 mg/m ³ ; 50 ppm
			(may be absorbed through the skin)
		Canada: BC, OEL TWA	20 ppm
		Canada: Québec, VEMP	20 ppm
141-78-6	Ethyl acetate	Canada: Alberta, OEL 8 hour	1,440 mg/m ³ ; 400 ppm
		Canada: BC, OEL TWA	150 ppm
		Canada: Québec, VEMP	1,440 mg/m ³ ; 400 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

Appropriate engineering controls

Provide good ventilation and/or an exhaust system in the work area.

Individual protection measures, such as personal protective equipment

Respiratory protection:	Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded. In case of inadequate ventilation wear respiratory protection. Recommendation: Use filter type A (= against vapours of organic substances) according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2. The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.
Hand protection:	Protective gloves according to OSHA Standard - 29 CFR: 1910.138. Glove material: Nitrile rubber - Layer thickness ≥ 0.4 mm Breakthrough time: > 480 min Observe glove manufacturer's instructions concerning penetrability and breakthrough time. Preventive skin protection (cremes) in accordance with manufacturer's recommendation.
Eye protection:	Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.
Body protection:	Flame retardant, antistatic and chemical resistant protective clothing.
General hygiene considerations:	Obtain special instructions before use. Do not breathe vapours. Do not get in eyes, on skin, or on clothing. Avoid contact during pregnancy/while nursing. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off immediately all contaminated clothing and wash it before reuse. Work place should be equipped with a shower and an eye rinsing apparatus.

Environmental exposure controls

Refer to 6.: Section "Environmental precautions".

9 Physical and chemical properties

Information on basic physical and chemical properties

Physical state at 20 °C and 101.3 kPa	liquid
Colour:	colourless
Odour:	Characteristic
Odour threshold:	No data available

Melting point and freezing point:	-95 °C (toluene)
Boiling point or initial boiling point and boiling range:	> 76 °C (ethyl acetate)
Flammability:	Highly flammable liquid and vapour.
Lower and upper explosion limit or lower and upper flammability limit:	LEL (Lower Explosion Limit): 1.00 Vol-% (toluene) UEL (Upper Explosive Limit): 11.50 Vol-% (ethyl acetate)
Flash point/flash point range:	-4 °C (DIN 53213)
Evaporation rate:	No data available
Auto-ignition temperature:	Not self-igniting
Decomposition temperature:	No data available
pH:	No data available
Kinematic viscosity:	at 20 °C: < 400 mm ² /s
Water solubility:	Practically insoluble
Partition coefficient — n-octanol/water:	at 20 °C: 2.73 log K(o/w) (toluene) Based on the n-octanol/water partition coefficient significant accumulation in organisms is not expected. at 25 °C: 0.68 log K(o/w) (ethyl acetate) Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.
Vapour pressure:	at 20 °C: 60.23 hPa
Density and/or relative density	at 20 °C: 1 g/mL
Vapour density:	No data available
Particle characteristics:	Not applicable

Additional information

Explosive properties:	vapours may form explosive mixtures with air.
Ignition temperature:	426 °C
Solvent content:	70 %
Solid content:	30 %

10 Stability and reactivity

Reactivity:	Highly flammable liquid and vapour.
Chemical stability:	Product is stable under normal storage conditions.
Possibility of hazardous reactions:	vapours may form explosive mixtures with air. Heating will lead to pressure increase: danger of bursting and explosion.
Conditions to avoid:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Protect from direct sunlight.
Incompatible materials:	Strong acids, strong bases, strong oxidizing agents
Hazardous decomposition products:	No hazardous decomposition products when regulations for storage and handling are observed.

11 Toxicological information

Information on the likely routes of exposure

No data available

Health hazard information

Acute toxicity (oral): Based on available data, the classification criteria are not met.

ATEmix (calculated) > 5,000 mg/kg

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.

ATEmix (vapour, calculated) > 20 mg/kg

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: Lack of data.

Carcinogenicity: Lack of data.

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 (CAS 108-88-3):

LD50 Rat, oral: 5,580 mg/kg (EU B.1)

LD50 Rabbit, dermal: 12,267 mg/kg

LC50 Rat, inhalative (vapour): 28.1 mg/L/4h (OECD 403)

Information about Ethyl acetate (CAS 141-78-6):

LD50 Rabbit, oral: 4,934 mg/kg (OECD 401)

LD50 Rabbit, dermal: > 20,000 mg/kg

LC50 Rat, inhalative (vapour): > 22.5 mg/L/6h, no mortality occurred

Symptoms

In case of inhalation:

Inhalation of vapours exceeding the allowable WEL/TLV-levels may pose a health hazard as well as lead to irritation of mucous membranes and respiratory system, cause kidney and liver damage as well as adversely affect the central nervous system. Higher doses may lead to a narcotic effect.

After contact with skin:

The product is skin resorptive. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin.

After eye contact: Upon direct contact with eyes may cause burning, tearing, redness.

12 Ecological information

Ecotoxicity

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

Information about Toluene (CAS 108-88-3):

Fish toxicity:

LC50 *Oncorhynchus kisutch* (silver salmon): 5.5 mg/L/96h

NOEC *Oncorhynchus kisutch* (silver salmon): 1.39 mg/L/40d

Daphnia toxicity:

EC50 *Ceriodaphnia dubia* (water flea): 3.78 mg/L/48h (US EPA 600/4-91-003)

NOEC *Ceriodaphnia dubia* (water flea): 0.74 mg/L/7d (US EPA 600/4-91-003)

Algae toxicity:

EC50 *Chlamydomonas angulosa*: 134 mg/L/3h

NOEC *Skeletonema costatum*: 10 mg/L/72h (OECD 201)

Information about Ethyl acetate (CAS 141-78-6):

Fish toxicity:

LC50 *Pimephales promelas* (fathead minnow): 230 mg/L/96h (US EPA E03-05)

NOEC *Pimephales promelas* (fathead minnow): 6.9 mg/L/32d (data obtained by analogy conclusion, e.g. (Q)SAR)

Daphnia toxicity:

EC50 *Daphnia Cucullata*: 165 mg/L/48h (weight of evidence)

NOEC *Daphnia magna* (Big water flea): 2.4 mg/L/21d (OECD 211)

Algae toxicity:

ErC50 *Desmodesmus subspicatus* (green algae): 5,600 mg/L/48h (DIN 38412)

NOEC *Chlorella pyrenoidosa*: ≥ 1,000 mg/L/72h

Effects in sewage plants: Information about Toluene (CAS 108-88-3):

EC50 activated sludge: 84 mg/L/24h

Persistence and degradability

Further details: Biodegradability:

Information about Toluene (CAS 108-88-3):

Oxygen consumption: 81%/5d, easily bio-degradable

Information about Ethyl acetate (CAS 141-78-6):

Oxygen consumption: 69%/20d, easily bio-degradable

Bioaccumulative potential

Information about Toluene (CAS 108-88-3):

Bioconcentration factor (BCF): 90

Partition coefficient — n-octanol/water:

at 20 °C: 2.73 log K(o/w) (toluene)

Based on the n-octanol/water partition coefficient significant accumulation in organisms is not expected.

at 25 °C: 0.68 log K(o/w) (ethyl acetate)

Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.

Mobility in soil

Information about Toluene (CAS 108-88-3):

log KOC: 2.31

Other adverse effects

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

13 Disposal considerations

Waste treatment methods

Product

Recommendation: Dispose of waste according to applicable legislation. Do not allow to enter drains.

Package

Recommendation: Dispose of waste according to applicable legislation. Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

14 Transport information

UN number

TDG: UN1263
IMDG, IATA-DGR: UN 1263

UN proper shipping name

TDG: UN 1263, Paint
IMDG, IATA-DGR: UN 1263, PAINT

Transport hazard class

TDG: 3
IMDG: Class 3, Subrisk -
IATA-DGR: Class 3



Packing group

TDG, IMDG, IATA-DGR: II

Environmental hazards

Marine pollutant: no

Special precautions in connection with transport or conveyance either within or outside the premises

Canada: Transportation of Dangerous Goods (TDG)

Special Provisions: 59, 142
Explosive limit and limited quantity index: 5L
Passenger carrying road or rail index: 5L

Sea transport (IMDG)

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

Air transport (IATA)

Proper shipping name: UN 1263, PAINT
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

15 Regulatory information

National regulations - Canada

Toluene: DSL: listed
Priority Substances List: listed (PSL 1)
Ethyl acetate: DSL: listed

Further regulations, limitations and legal requirements

No data available

16 Other information

Text for labelling: Contains:
Toluene
Ethyl acetate
Revision date: 17/12/2025
Date of first version: 21/10/1994
Reason of change: General revision: Safety Data Sheet according to Hazardous Products Regulations (HPR) 2022
Classification procedure: Physical hazards: on basis of test data
Health hazards, environmental hazards: calculation method

Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
 Aquatic toxicity - acute: Hazardous to the aquatic environment - acute
 Aquatic toxicity - chronic: Hazardous to the aquatic environment - chronic
 AS/NZS: Australian Standards/New Zealand Standards
 Aspiration Toxicity: Aspiration toxicity
 ATEmix: Acute Toxicity Estimate of mixture
 BCF: Bioconcentration Factor
 CAS: Chemical Abstracts Service
 CFR: Code of Federal Regulations
 CLP: Classification, Labelling and Packaging
 DIN: German Institute for Standardization
 DMEL: Derived minimal effect level
 DNEL: Derived no-effect level
 DOT: Department of Transportation's Safety Regulations (USA)
 DSL: Domestic Substances List
 EC: European Community
 EC50: Effective Concentration 50%
 EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods
 EN: European Standard
 EQ: Excepted quantities
 Eye Irritation: Eye irritation
 Flammable Liquid: Flammable liquid
 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
 NOEC: No Observed Effect Concentration
 OECD: Organisation for Economic Co-operation and Development
 OEL: Occupational Exposure Limit Value
 OSHA: Occupational Safety and Health Administration
 PBT: Persistent, bioaccumulative and toxic
 PNEC: Predicted no-effect concentration
 PSL: Priority Substances List
 QSAR: Quantitative Structure-Activity Relationship
 Reproductive toxicity: Reproductive toxicity
 Skin Irritation: Skin irritation
 STOT RE: Specific target organ toxicity - repeated exposure
 STOT SE: Specific target organ toxicity - single exposure
 TDG: Transportation of Dangerous Goods Regulation in Canada
 TLV: Threshold Limit Value
 TRGS: Technical Rules for Hazardous Substances
 UN: United Nations
 vPvB: Very persistent and very bioaccumulative
 WEL: Workplace Exposure Limit

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.