

1. Identification

Product identifier

Trade name: 636W107 - ProSeal Ring-primer

This safety data sheet pertains to the following products:
636W107=0.125 = Primer ProSeal (DE,EN,NL,FR,IT)

Relevant identified uses of the substance or mixture and uses advised against

General use: Primer, Adhesion promotor for orthopedic procedures.
Reserved for industrial and professional use.

Details of the supplier of the safety data sheet

Company name: Otto Bock Health Care
Street/POB-No.: 3820 W. Great Lakes Drive
Zip code, city: Salt Lake City, UT 84120
USA

WWW: www.ottobockus.com

Telephone: +1 (801) 956-2400

Telefax: +1 (801) 956-2401

Department responsible for information:

Quality Department,
Telephone: +1 (801) 954-2304 (7 AM – 3 PM, Mountain Time),
Email: USRegulatory@ottobock.com

Additional information:

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

Emergency telephone number

CHEMTREC, Telephone: +1 (800) 424-9300

Transport:

CONSULTANK Lutz Harder GmbH (Contract QUALI003)

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

2. Hazard identification

Classification of the substance or mixture

Flammable Liquid - Category 2

Highly flammable liquid and vapor.

Skin Irritation - Category 2

Causes skin irritation.

Sensitization - skin - Category 1

May cause an allergic skin reaction.

Reproductive toxicant - Category 2

Suspected of damaging the unborn child.

Specific Target Organ Toxicity (Single Exposure) - Category 3

May cause drowsiness or dizziness.

Specific Target Organ Toxicity (Repeated Exposure) - Category 2

May cause damage to organs through prolonged or repeated exposure.

Aspiration Toxicity - Category 1

May be fatal if swallowed and enters airways.

Aquatic toxicity - acute - Category 1

Very toxic to aquatic life.

Aquatic toxicity - chronic - Category 1

Very toxic to aquatic life with long lasting effects.

Label elements

Symbols:



Signal word:

Danger

Hazard statements:

Highly flammable liquid and vapor.
May be fatal if swallowed and enters airways.
Causes skin irritation.
May cause an allergic skin reaction.
May cause drowsiness or dizziness.
Suspected of damaging the unborn child.
May cause damage to organs through prolonged or repeated exposure.
Very toxic to aquatic life with long lasting effects.

Precautionary statements:

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.
Do not breathe fume/gas/mist/vapors/spray.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection.

IF SWALLOWED: Immediately call a POISON CENTER/doctor.
Get medical advice/attention if you feel unwell.
Do NOT induce vomiting.
If skin irritation occurs: Get medical advice/attention.
Wash contaminated clothing before reuse.

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

Other hazards

May be harmful in contact with skin. May be harmful if inhaled.
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.
While curing will be generated vapors.

3. Composition/information on ingredients

Mixtures

Chemical characterization: Contains acrylate polymer 1% - 5% and rubber, chlorinated

Relevant ingredients:

CAS No.	Designation	Concentration	Classification
CAS 110-82-7	Cyclohexane	45 - 50 %	Flammable Liquid - Category 2. Skin Irritation - Category 2. Specific Target Organ Toxicity (Single Exposure) - Category 3. Aspiration Toxicity - Category 1. Aquatic toxicity - acute - Category 1 (M-factor = 1). Aquatic toxicity - chronic - Category 1 (M-factor = 1).
CAS 1330-20-7	Xylene (isomeric mixture)	30 - 35 %	Flammable Liquid - Category 3. Acute Toxicity - dermal - Category 4. Acute Toxicity - inhalative - Category 4. Skin Irritation - Category 2.
CAS 100-41-4	Ethylbenzene	< 11 %	Flammable Liquid - Category 2. Acute Toxicity - inhalative - Category 4. Specific Target Organ Toxicity (Repeated Exposure) - Category 2. Aspiration Toxicity - Category 1. Aquatic toxicity - chronic - Category 3.
CAS 64-17-5	Ethanol	5 - 10 %	Flammable Liquid - Category 2.
CAS 141-78-6	Ethyl acetate	< 4 %	Flammable Liquid - Category 2. Eye Irritation - Category 2A. Specific Target Organ Toxicity (Single Exposure) - Category 3.
CAS 67-63-0	Isopropyl alcohol	< 1 %	Flammable Liquid - Category 2. Eye Irritation - Category 2A. Specific Target Organ Toxicity (Single Exposure) - Category 3.
CAS 25068-38-6	Bisphenol A epoxy resin (molecular-weight < 700)	< 0.5 %	Skin Irritation - Category 2. Eye Irritation - Category 2A. Sensitization - skin - Category 1. Aquatic toxicity - chronic - Category 2.
CAS 67-56-1	Methanol	< 0.4 %	Flammable Liquid - Category 2. Acute Toxicity - oral - Category 3. Acute Toxicity - dermal - Category 3. Acute Toxicity - inhalative - Category 3. Specific Target Organ Toxicity (Single Exposure) - Category 1.
CAS 108-88-3	Toluene	< 0.3 %	Flammable Liquid - Category 2. Skin Irritation - Category 2. Eye Irritation - Category 2A. Reproductive toxicant - Category 2. Specific Target Organ Toxicity (Single Exposure) - Category 3. Specific Target Organ Toxicity (Repeated Exposure) - Category 2. Aspiration Toxicity - Category 1. Aquatic toxicity - chronic - Category 3.

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

4. First aid measures

General information:	First aider: Pay attention to self-protection! If medical advice is needed, have product container or label at hand.
In case of inhalation:	Move victim to fresh air. Seek medical treatment in case of troubles.
Following skin contact:	Take off contaminated clothing. After contact with skin, wash immediately with soap and plenty of water. Consult 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. In case of troubles or persistent symptoms, consult an ophthalmologist.
After swallowing:	If person is clearly conscious, have them drink two glasses of water to dilute ingested material. Do NOT induce vomiting. Immediately get medical attention. Never give an unconscious person anything through the mouth.

Most important symptoms/effects, acute and delayed

Causes skin irritation. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways. Inhaling can lead to irritations of the respiratory tract and mucous membrane.

Information to physician

Treat symptomatically.
Symptoms of poisoning may develop several hours following exposure. Victim should be under medical observation for at least 48 hours after exposure.

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:

Alcohol resistant foam, dry chemical powder, carbon dioxide.
fire extinguisher class B.

Extinguishing media which must not be used for safety reasons:

Full water jet

Specific hazards arising from the chemical

Highly flammable liquid and vapor. Vapors form potentially explosive mixtures with air, which are heavier than air. Air-Vapor mixture may travel great distances at floor level and lead to backflash when exposed to an ignition source.

In case of fire may be liberated: hydrogen chloride, carbon monoxide and carbon dioxide.

Protective equipment and precautions for firefighters

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

Additional information:

Heating will lead to pressure increase: danger of bursting and explosion. Use fine water spray to cool endangered containers.

Do not allow water used to extinguish fire to enter drains, ground or waterways.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid exposure. Eliminate all ignition sources if safe to do so. If possible, eliminate leakage. Provide adequate ventilation.

Wear appropriate protective equipment. Keep unprotected people away.

Avoid contact with skin and eyes. Do not breathe vapors.

Environmental precautions:

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

If necessary, notify appropriate authorities.

Methods and material for containment and cleaning up

Methods for clean-up:

Vapors may form explosive mixtures with air.

Take up with non-flammable, liquid binding material (e.g. sand/earth/diatomaceous earth/vermiculit) and perform disposal according to instructions. Final cleaning.

Additional information:

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

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 vapors. Wear appropriate protective equipment.

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

Take off immediately all contaminated clothing and wash it before reuse. When handling large quantities, supply emergency spray.

Precautions against fire and explosion:

Vapors may form explosive mixtures with air.

Keep away from heat. Keep away from sources of ignition - No smoking.

Use only spark proof tools.

Take precautionary measures against static discharges.

Avoid open flames.

Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

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

Store only in original container. Protect from direct sunlight.

Hints on joint storage:

Keep away from combustible materials.

Keep away from acids, strong oxidizing agents.

8. Exposure controls/personal protection

Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
110-82-7	Cyclohexane	USA: ACGIH: TWA	344 mg/m ³ ; 100 ppm
		USA: IDLH: TWA	1,300 ppm [10% LEL]
		USA: NIOSH: TWA	1,050 mg/m ³ ; 300 ppm
		USA: OSHA: TWA	1,050 mg/m ³ ; 300 ppm
1330-20-7	Xylene (isomeric mixture)	USA: ACGIH: TWA	20 ppm
		USA: IDLH: TWA	900 ppm
		USA: NIOSH: STEL	655 mg/m ³ ; 150 ppm
		USA: NIOSH: TWA	435 mg/m ³ ; 100 ppm
		USA: OSHA: TWA	435 mg/m ³ ; 100 ppm
100-41-4	Ethylbenzene	USA: ACGIH: TWA	87 mg/m ³ ; 20 ppm
		USA: IDLH: TWA	800 ppm [10% LEL]
		USA: NIOSH: STEL	545 mg/m ³ ; 125 ppm
		USA: NIOSH: TWA	435 mg/m ³ ; 100 ppm
		USA: OSHA: TWA	435 mg/m ³ ; 100 ppm
64-17-5	Ethanol	USA: ACGIH: STEL	1,000 ppm
		USA: IDLH: TWA	3,300 ppm [10% LEL]
		USA: NIOSH: TWA	1,900 mg/m ³ ; 1,000 ppm
		USA: OSHA: TWA	1,900 mg/m ³ ; 1,000 ppm
141-78-6	Ethyl acetate	USA: ACGIH: STEL	200 ppm
		USA: ACGIH: TWA	100 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
67-63-0	Isopropyl alcohol	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
67-56-1	Methanol	USA: ACGIH: STEL	328 mg/m ³ ; 250 ppm (may be absorbed through the skin)
		USA: ACGIH: TWA	262 mg/m ³ ; 200 ppm (may be absorbed through the skin)
		USA: IDLH: TWA	6,000 ppm
		USA: NIOSH: STEL	325 mg/m ³ ; 250 ppm (may be absorbed through the skin)
		USA: NIOSH: TWA	260 mg/m ³ ; 200 ppm (may be absorbed through the skin)
		USA: OSHA: TWA	260 mg/m ³ ; 200 ppm

CAS No.	Designation	Type	Limit value
108-88-3	Toluene	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

Biological limit values:

CAS No.	Designation	Type	Limit value	Parameter	Sampling
110-82-7	Cyclohexane	USA: ACGIH-BEI, urine	50 mg/g creatinine	1,2-Cyclohexanediol	end of shift at end of work week
1330-20-7	Xylene (isomeric mixture)	USA: ACGIH-BEI, urine	0.3 g/g creatinine	Methylhippuric acids in ur	end of exposure or end of shift
100-41-4	Ethylbenzene	USA: ACGIH-BEI, urine	150 mg/g creatinine	Sum of mandelic acid and phenylglyoxylic acid in urine	end of exposure or end of shift
67-63-0	Isopropyl alcohol	USA: ACGIH-BEI, urine	40 mg/L	Acetone in urine	end of shift at end of work week
67-56-1	Methanol	USA: ACGIH-BEI, urine	15 mg/L	Methanol	end of exposure or end of shift
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

Use local exhaust.

Personal protection equipment (PPE)

Respiratory protection: Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded. Respiratory protective device: with filter for vapors/gases
The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product.

Hand protection: Protective gloves according to OSHA Standard - 29 CFR: 1910.138.
Glove material: Fluororubber (Viton)
breakthrough time > 480 min.
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

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

Body protection: Wear suitable protective clothing.

General hygiene considerations:

Obtain special instructions before use.
 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only in well-ventilated areas.
 Avoid contact with skin and eyes. Do not breathe vapors. When using do not eat, drink or smoke.
 Wash hands before breaks and after work. Take off immediately all contaminated clothing and wash it before reuse.
 When handling large quantities, supply emergency spray.

Environmental exposure controls

Refer to 6.: Section "Environmental precautions".

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state at 68 °F and 101.3 kPa	liquid
Color:	yellow
Odor:	like solvent
Odor threshold:	No data available
Melting point/freezing point:	not applicable
Initial boiling point and boiling range:	163.58 °F (ASTM)
Flammability:	Highly flammable liquid and vapor.
Explosion limits:	LEL (Lower Explosion Limit): 1.00 Vol-% UEL (Upper Explosive Limit): 11.00 Vol-%
Flash point/flash point range:	1.04 °F (Setaflash)
Evaporation rate:	approx. 6.4 (calculated)
Auto-ignition temperature:	500 °F (assessment)
Decomposition temperature:	No data available
pH:	at 73.4 °F: 5.5 (ASTM)
Dynamic viscosity:	at 68 °F: < 25 mPa*s
Viscosity, kinematic:	30.5 mm²/s
Water solubility:	approx. 10 %
Partition coefficient: n-octanol/water:	No data available
Vapor pressure:	at 68 °F: 110.9 hPa (ASTM)
Density:	0.82 g/mL
Vapor density:	1.7 (assessment)
Particle characteristics:	Not applicable

10. Stability and reactivity

Reactivity:	Highly flammable liquid and vapor. Potentially explosive vapor/air mixtures may form.
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	Heating will lead to pressure increase: danger of bursting and explosion. Hazardous polymerisation: will not occur.

Conditions to avoid: Keep away from heat sources, sparks and open flames.
Protect from direct sunlight.
Keep away from sources of ignition - No smoking.
Take precautionary measures against static discharges.

Incompatible materials: Strong oxidizing agents, acids.

11. Toxicological information

Information on toxicological effects

Toxicological effects: The statements are derived from the properties of the single components. No toxicological data is available for the product as such.

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.
May be harmful in contact with skin. ATEmix calculated: 2,000 - 5,000 mg/kg

Acute toxicity (inhalative): Based on available data, the classification criteria are not met.
May be harmful if inhaled. ATEmix calculated: 20 - 50 mg/L

Skin corrosion/irritation: Skin Irritation - Category 2 = Causes skin irritation.

Serious eye damage/irritation: Lack of data.

Sensitisation to the respiratory tract: Lack of data.

Skin sensitisation: Sensitization - skin - Category 1 = May cause an allergic skin reaction.

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Lack of data.

Reproductive toxicity: Reproductive toxicant -
Category 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) - Category 3 = May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure): Specific Target Organ Toxicity (Repeated Exposure) -
Category 2 = May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard: Aspiration Toxicity -
Category 1 = May be fatal if swallowed and enters airways.

Other information:

2 percent of the mixture consists of ingredient(s) of unknown acute toxicity (oral).
2 percent of the mixture consists of ingredient(s) of unknown acute toxicity (dermal).
4 percent of the mixture consists of ingredient(s) of unknown acute toxicity (inhalativ).

Information about Cyclohexane:

LD50 Rat, oral: 6,200 mg/kg
LD50 Rat, dermal: > 2,000 mg/kg
LC50 Rat, inhalative: > 32.9 mg/L

Information about Xylene:

LD50 Rat, oral: 3,523 mg/kg
LD50 Rabbit, dermal: > 4,200 mg/kg
LC50 Rat, inhalative: 29 mg/L

Information about Ethylbenzene:

LD50 Rat, oral: 7,769 mg/kg
LD50 Rabbit, dermal: 15,433 mg/kg
LC50 Rat, inhalative: 17.4 mg/L

Information about Ethanol:

LD50 Rat, oral: 17,800 mg/kg
LD50 Rabbit, dermal: > 15,800 mg/kg
LC50 Rat, inhalative: 124.7 mg/L

Information about Ethyl acetate:

LD50 Rat, oral: {dec5,62E3} mg/kg
LD50 Rabbit, dermal: > 18,020 mg/kg
LC50 Rat, inhalative: 70.5 mg/L

Information about Isopropyl alcohol:

LD50 Rat, oral: 4,710 mg/kg
LD50 Rabbit, dermal: 12,870 mg/kg
LC50 Rat, inhalative: 72.6 mg/L

Information about Reaction product: Bisphenol-A-(epichlorohydrin) epoxy resin (number average molecular weight ≤ 700):

LD50 Rat, oral: > 1,000 mg/kg
LD50 Rat, dermal: > 1,000 mg/kg

Information about Methanol:

LD50 Rat, oral: > 1,187 mg/kg
LD50 Rabbit, dermal: 17,100 mg/kg
LC50 Rat, inhalative: 128.2 mg/L/4h

Information about Toluene:

LD50 Rat, oral: 5,550 mg/kg
LD50 Rat, dermal: 12,000 mg/kg
LC50 Rat, inhalative: 30 mg/L/4h

For carcinogenic effects:

Information about Xylene:

IARC Rating: Group 3
OSHA Carcinogen: not listed
NTP Rating: not listed

Information about Ethylbenzene:

IARC Rating: Group 2B
OSHA Carcinogen: not listed
NTP Rating: not listed

Information about Isopropyl alcohol:

IARC Rating: Group 3
OSHA Carcinogen: not listed
NTP Rating: not listed

Information about Toluene:

IARC Rating: Group 3
OSHA Carcinogen: not listed
NTP Rating: not listed

Symptoms

Depression of central nervous system:

Symptoms: headache, nausea, dizziness, fatigue, diminished responsiveness, coordination disorders, nausea, drowsiness, unconsciousness.

Liver and kidney damage:

Symptoms: loss of appetite, loss of weight, fatigue, abdominal pain, jaundice, elevation of blood urea, increasing creatinine, reduced or no urine production, increased Protein content, blood in urine, lower back pain, pain when urinating.

In case of inhalation: Irritant effect on the respiratory tract.

cough, sneeze, headache, hoarseness, sore throat, Thoracic oppression, Breathing difficulties.

In case of ingestion:

When swallowed and vomited immediately, aspiration into the lungs may occur resulting in chemical pneumonia or suffocation.

The following symptoms may occur:

Gastrointestinal complaints

Cough, shortage of breath, wheezing, pneumonia.

Mucous membrane irritation, nausea, vomiting, pain, nausea, Diarrhea.

After contact with skin: Danger of cutaneous absorption.

itching redness of the skin, dry skin, oedema (swelling).

After eye contact: Mild irritant, causes tears.

Redness, oedema (swelling), impairment of vision, pain.

12. Ecological information

Ecotoxicity

Aquatic toxicity:

Very toxic to aquatic life with long lasting effects.

Information about Cyclohexane:

LC50 Pimephales promelas (fathead minnow): 4.53 mg/L/96h

EC50 Daphnia magna (Big water flea): 0.9 mg/L/48h

EC50 Green algae: 3.4 mg/L/72h

Information about Xylene:

LC50 Oncorhynchus mykiss: 2.6 mg/L/96h

EC50 Daphnia magna (Big water flea): 1.1 mg/L/48h

NOEC Daphnia magna (Big water flea): 0.41 mg/L/21d

EC50 Green algae: 0.8 mg/L/72h

NOEC Green algae: 0.73 mg/L/72h

Information about Ethylbenzene:

LC50 Oncorhynchus mykiss: 4.2 mg/L/96h

EC50 Daphnia magna (Big water flea): 1.81 mg/L/24h

EC50 Green algae: 3.6 mg/L/96h

Information about Ethanol:

LC50 Oncorhynchus mykiss: 42 mg/L/96h

EC50 Daphnia magna (Big water flea): 5,012 mg/L/48h

NOEC Daphnia magna (Big water flea): 9.6 mg/L/11d

EC50 Green algae: 1,000 mg/L/96h

NOEC Green algae: < 500 mg/L/96h

Information about Ethyl acetate:

EC50 Daphnia: 164 mg/L/48h

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

EC50 Green algae: 2,500 mg/L/72h

Information about Isopropyl alcohol:

LC50 Pimephales promelas (fathead minnow): 6,120 mg/L/96h

NOEC Daphnia magna (Big water flea): 30 mg/L/21d

EC50 Daphnia: 1,400 mg/L/48h

EC50 algae: > 1,000 mg/L/24h

Information about Reaction product: Bisphenol-A-(epichlorohydrin) epoxy resin (number average molecular weight \leq 700):

LC50 fish: 1.41 mg/L/96h

NOEC Daphnia magna (Big water flea): 0.3 mg/L/21d

Information about Methanol:

LC50 Pimephales promelas (fathead minnow): 22,300 mg/L/96h

NOEC Daphnia magna (Big water flea): 22,200 mg/L/48h

EC50 algae: 16.9 mg/L/96h

NOEC algae: 9.96 mg/L/96h

Information about toluene:

EC50 fish: 5.5 mg/L/96h

NOEC Cyprinus carpio (Common Carp): 3.2 mg/L/28d

EC50 Daphnia magna (Big water flea): 3.78 mg/L/48h

EC50 Green algae: 12.5 mg/L/72h

Persistence and degradability

Further details: No data available

Bioaccumulative potential

Partition coefficient: n-octanol/water:

No data available

Mobility in soil

No data available

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: Special waste. Incinerate according to applicable local, state and federal regulations.

Package

Recommendation: Dispose of waste according to applicable legislation.

14. Transport information

UN number

DOT: UN1993

IMDG, IATA-DGR: UN 1993

UN proper shipping name

DOT: UN 1993, FLAMMABLE LIQUIDS, N.O.S. (Cyclohexane, xylene)

IMDG, IATA-DGR: UN 1993, FLAMMABLE LIQUID, N.O.S. (Cyclohexane, xylene)

Transport hazard class(es)

DOT: 3

IMDG: Class 3, Subrisk -

IATA-DGR: Class 3

Packing group

DOT, IMDG, IATA-DGR: II

Environmental hazards

Marine pollutant: yes



Transport in bulk according to IMO instruments

No data available

Special precautions for user

USA: Department of Transportation (DOT)

Labels:	3
Symbols:	G
Special Provisions:	IB2, T7, TP1, TP8, TP28
Packaging – Exceptions:	150
Packaging – Non-bulk:	202
Packaging – Bulk:	242
Quantity limitations – Passenger aircraft / rail:	5 L
Quantity limitations – Cargo only:	60 L
Vessel stowage – Location:	B

Sea transport (IMDG)

EmS:	F-E, S-E
Special Provisions:	274
Limited quantities:	1 L
Excepted quantities:	E2
Package - Instructions:	P001
Package - Provisions:	-
IBC - Instructions:	IBC02
IBC - Provisions:	-
Tank instructions - IMO:	-
Tank instructions - UN:	T7
Tank instructions - Provisions:	TP1, TP8, TP28
Stowage and handling:	Category B.
Properties and observations:	-
Marine pollutant:	yes
Segregation group:	none

Air transport (IATA)

Proper shipping name:	UN 1993, FLAMMABLE LIQUID, N.O.S. (Cyclohexane, xylene)
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
Emergency Response Guide-Code (ERG):	3H

15. Regulatory information

National regulations - U.S. Federal Regulations

Cyclohexane:

TSCA Inventory: listed

Clean Air Act:

CAA SOCM I Chemical: yes

Clean Water Act:

CWA Hazardous Substances: Category C; RQ 1000.0 lbs

Other Environmental Laws:

CERCLA: RQ 1000 lbs.

SARA Title III, Section 313, Toxic Release: NPFAS;

De Minimis <=1.0 %; Thresholds 25000/10000 lbs

NIOSH Recommendations:

Occupational Health Guideline: 0163

Xylene (isomeric mixture):

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 I Chemical: yes

Clean Water Act:

CWA Hazardous Substances: Category B; RQ 100.0 lbs

Other Environmental Laws:

CERCLA: RQ 100 lbs.

SARA Title III, Section 313, Toxic Release: NPFAS;

De Minimis <=1.0 %; Thresholds 25000/10000 lbs

Ethylbenzene:

TSCA Inventory: listed

Carcinogen Status: IARC Rating: Group 2B

OSHA Carcinogen: not listed

NTP Rating: not listed

Clean Air Act:

CAA Hazardous Air Pollutants: yes

CAA SOCM I Chemical: yes

Clean Water Act:

CWA Hazardous Substances: Category C; RQ 1000.0 lbs

CWA Priority Pollutants: listed

Other Environmental Laws:

CERCLA: RQ 1000 lbs.

RCRA Groundwater Monitoring: listed

SARA Title III, Section 313, Toxic Release: NPFAS;

De Minimis <=0.1 %; Thresholds 25000/10000 lbs

NIOSH Recommendations:

Occupational Health Guideline: 0264*

Ethanol:

TSCA Inventory: listed

NIOSH Recommendations:

Occupational Health Guideline: 0262

Ethyl acetate:

TSCA Inventory: listed

Other Environmental Laws:

CERCLA: RQ 5000 lbs.

NIOSH Recommendations:

Occupational Health Guideline: 0260

Isopropyl alcohol:

TSCA Inventory: listed

Carcinogen Status: IARC Rating: Group 3

OSHA Carcinogen: not listed

NTP Rating: not listed

Other Environmental Laws:

SARA Title III, Section 313, Toxic Release: NPFAS;

De Minimis <=1.0 %; Thresholds 25000/10000 lbs

NIOSH Recommendations:

Occupational Health Guideline: 0359

Bisphenol A epoxy resin (molecular-weight < 700):

TSCA Inventory: listed

Methanol:

TSCA Inventory: listed

Clean Air Act:

CAA Hazardous Air Pollutants: yes

CAA SOCM Chemical: yes

Other Environmental Laws:

CERCLA: RQ 5000 lbs.

SARA Title III, Section 313, Toxic Release: NPFAS;

De Minimis <=1.0 %; Thresholds 25000/10000 lbs

NIOSH Recommendations:

Occupational Health Guideline: 0397

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: Category C; RQ 1000.0

lbs

CWA Priority Pollutants: listed

Other Environmental Laws:

CERCLA: RQ 1000 lbs.

RCRA Hazardous Wastes: Waste Code U220

RCRA Groundwater Monitoring: listed

SARA Title III, Section 313, Toxic Release: NPFAS;

De Minimis <=1.0 %; Thresholds 25000/10000 lbs

NIOSH Recommendations:

Occupational Health Guideline: 0619

National regulations - U.S. State Regulations

Cyclohexane:	New York Right-To-Know: listed
Xylene (isomeric mixture):	New York Right-To-Know: listed
Ethylbenzene:	California Proposition 65: cancer New York Right-To-Know: listed
Ethyl acetate:	New York Right-To-Know: listed
Methanol:	California Proposition 65: developmental New York Right-To-Know: listed
Toluene:	California Proposition 65: developmental New York Right-To-Know: listed

Further regulations, limitations and legal requirements

No data available

16. Other information

Text for labeling:

Contains 45 - 50 % Cyclohexane, 30 - 35 % Xylene (isomeric mixture), < 11 % Ethylbenzene, 5 - 10 % Ethanol, < 4 % Ethyl acetate, < 1 % Isopropyl alcohol, < 0.5 % Bisphenol A epoxy resin (molecular-weight < 700), < 0.4 % Methanol, < 0.3 % Toluene. Contains Cyclohexane, Ethylbenzene, Reaction product: Bisphenol-A-(epichlorohydrin) epoxy resin (number average molecular weight \leq 700) and Toluene
2 percent of the mixture consists of ingredient(s) of unknown acute toxicity (oral).
2 percent of the mixture consists of ingredient(s) of unknown acute toxicity (dermal).
4 percent of the mixture consists of ingredient(s) of unknown acute toxicity (inhalativ).

Revision date:

3/2/2026

Date of first version:

12/20/2010

Reason of change:

Changes in section 8: Biological Limit Value

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:

Acute Toxicity: Acute toxicity
 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
 CAS: Chemical Abstracts Service
 CFR: Code of Federal Regulations
 CLP: Classification, Labelling and Packaging
 DMEL: Derived minimal effect level
 DNEL: Derived no-effect level
 DOT: Department of Transportation's Safety Regulations (USA)
 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
 M-factor: Multiplication factor
 OEL: Occupational Exposure Limit Value
 OSHA: Occupational Safety and Health Administration
 PBT: Persistent, bioaccumulative and toxic
 PNEC: Predicted no-effect concentration
 Reproductive toxicant: Reproductive toxicity
 Sensitization - skin: Skin sensitisation
 Skin Irritation: Skin irritation
 STOT RE: Specific target organ toxicity - repeated exposure
 STOT SE: Specific target organ toxicity - single exposure
 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.