

SAFETY DATA SHEET

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. PRODUCT IDENTIFIER

Product name

MITOPUR A2/45



chemius.net/Mn0e3

1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Relevant identified uses

PU Adhesive - Component A. PU moulding compound - Component A.

Uses advised against

No information.

1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Supplier

MITOL, tovarna lepil, d.o.o., Sežana
Address: Partizanska c. 78 Sežana, Slovenia
Phone: +386 5 73 12 300
Fax: +386 5 73 12 390
E-mail: lilijana.kocjan@mitol.si
Point of contact for safety info: Lilijana Kocjan Žorž

1.4. EMERGENCY TELEPHONE NUMBER

112

+386 5 73 12 300 (8:00-16:00)

SECTION 2. HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Classification according to Regulation (EC) No 1272/2008 (CLP)

According to the regulation, the product is not classified as hazardous.

2.2 LABEL ELEMENTS

2.2.1. Labelling according to Regulation (EC) No 1272/2008 [CLP]

Pictograms not applicable according to Regulation 1272/2008.

2.2.2. Contains:

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2.2.3. Special provisions

Special hazards are not known or expected.

2.3. OTHER HAZARDS

No information.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. SUBSTANCES

For mixtures see 3.2.

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3.2. MIXTURES

Name	CAS EC Index	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Conc. Limits	REACH Registration No.
Propane-1,2-diol, propoxylated	25322-69-4 500-039-8 -	<20	Acute Tox. 4; H302		-
phosphoric acid [B]	7664-38-2 231-633-2 015-011-00-6	<0,2	Met. Corr. 1; H290 Acute Tox. 4; H302 Skin Corr. 1B; H314	Skin Corr. 1B; H314: C ≥ 25 % Skin Irrit. 2; H315: 10 % ≤ C < 25 % Eye Irrit. 2; H319: 10 % ≤ C < 25 %	01-2119485924-24

Notes for substances:

B Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations.

In Part 3 entries with Note B have a general designation of the following type: "nitric acid ... %".

In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

SECTION 4. FIRST AID MEASURES

4.1. DESCRIPTION OF FIRST AID MEASURES

General notes

When in doubt or if feeling unwell seek medical assistance. Show the safety data sheet and label to the physician.

Following inhalation

Remove patient to fresh air - move out of dangerous area. If symptoms develop and persist, seek medical attention.

Following skin contact

Take off all contaminated clothing. Wash affected skin areas thoroughly with plenty of water and soap. If symptoms develop and persist, seek medical attention.

Following eye contact

Immediately flush eyes with running water, keeping eyelids apart. If the patient is wearing contact lenses, remove them immediately. If irritation persists, seek professional medical attention.

Following ingestion

Do not induce vomiting! Rinse mouth thoroughly with water. In case of doubt or if feeling unwell seek medical help. Show the physician the safety data sheet or label.

4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Inhalation

Excessive exposure to spray mist, fog, or vapours may cause respiratory irritation.

Skin contact

Prolonged and repeated exposure may cause redness, itching and cracking of the skin in sensitive people.

Eye contact

Contact with eyes can cause irritation (redness, tearing, pain).

Ingestion

May cause nausea/vomiting and diarrhea.

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4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

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SECTION 5. FIREFIGHTING MEASURES

5.1. EXTINGUISHING MEDIA

Suitable extinguishing media

Carbon dioxide. Dry chemical powder. Water spray. Alcohol resistant foam.

Unsuitable extinguishing media

Full water jet.

5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Hazardous combustion products

In case of heating harmful vapours/gases can be generated. In the event of fire the following can be generated: carbon monoxide (CO), carbon dioxide (CO₂). In the event of fire the following is released: nitrogen oxides (NO_x).

5.3. ADVICE FOR FIREFIGHTERS

Protective actions

In case of fire or heating do not breathe fumes/vapours.

Special protective equipment for firefighters

Firefighters should wear appropriate protective clothing for firefighters (including helmets, protective boots and gloves) (EN 469) and self-contained breathing apparatus (SCBA) with a full face-piece (EN 137).

Additional information

Contaminated firefighting water must be disposed of in accordance with the regulations; do not allow to reach the sewage system.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

6.1.1. For non-emergency personnel

Protective equipment

Use personal protective equipment (Section 8).

Emergency procedures

Ensure adequate ventilation. Prevent access to unprotected personnel. Prevent access to unauthorised personnel.

6.1.2. For emergency responders

High risk of slipping due to leakage/spillage of product.

6.2. ENVIRONMENTAL PRECAUTIONS

Do not allow product to reach water/drains/sewage systems or permeable soil. If accidental large entry into water or ground occurs, inform responsible authorities.

6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

6.3.1. For containment

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6.3.2. For cleaning up

Absorb product (with inert material), collect it in special container and dispose it to a licensed hazardous-waste disposal contractor.

6.3.3. Other information

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6.4. REFERENCE TO OTHER SECTIONS

See also Sections 8 and 13.

SECTION 7. HANDLING AND STORAGE

7.1. PRECAUTIONS FOR SAFE HANDLING

7.1.1. Protective measures

Measures to prevent fire

Ensure adequate ventilation.

Measures to prevent aerosol and dust generation

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Measures to protect the environment

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7.1.2. Advice on general occupational hygiene

Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Do not breathe vapours/mist. Keep working clothes separate from ordinary clothes. Remove contaminated clothes and wash them before reuse.

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

7.2.1. Technical measures and storage conditions

Keep in cool and well ventilated area. Keep away from food, drink and animal feeding stuffs.

7.2.2. Packaging materials

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7.2.3. Requirements for storage rooms and vessels

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7.2.4. Storage class

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7.2.5. Further information on storage conditions

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7.3. SPECIFIC END USE(S)

Recommendations

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Industrial sector specific solutions

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. CONTROL PARAMETERS

8.1.1. Occupational exposure limit values

Name (CAS)	Limit values		Short-term exposure limit		Remarks	Biological Tolerance Values
	ml/m ³ (ppm)	mg/m ³	ml/m ³ (ppm)	mg/m ³		
Orthophosphoric acid (7664-38-2)		1		2		

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8.1.2. Information on monitoring procedures

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 482:2021 Workplace exposure. Procedures for the determination of the concentration of chemical agents. Basic performance requirements.

8.1.3. DNEL/DMEL values

For components

Name	Type	Exposure route	Exposure frequency	Value	Remark
1-isopropyl-2,2-dimethyltrimethylene diisobutyrate (6846-50-0)	Worker	dermal	long term (systemic effects)	31,2 mg/kg bw/day	
1-isopropyl-2,2-dimethyltrimethylene diisobutyrate (6846-50-0)	Worker	inhalation	long term (systemic effects)	110 mg/m ³	
1-isopropyl-2,2-dimethyltrimethylene diisobutyrate (6846-50-0)	Consumer	dermal	long term (systemic effects)	18,8 mg/kg bw/day	
1-isopropyl-2,2-dimethyltrimethylene diisobutyrate (6846-50-0)	Consumer	inhalation	long term (systemic effects)	32,6 mg/m ³	
1-isopropyl-2,2-dimethyltrimethylene diisobutyrate (6846-50-0)	Consumer	oral	long term (systemic effects)	18,8 mg/kg bw/day	

8.1.4. PNEC values

For components

Name	Exposure route	Value	Remark
1-isopropyl-2,2-dimethyltrimethylene diisobutyrate (6846-50-0)	fresh water	0,014 mg/L	
1-isopropyl-2,2-dimethyltrimethylene diisobutyrate (6846-50-0)	marine water	0,0014 mg/L	
1-isopropyl-2,2-dimethyltrimethylene diisobutyrate (6846-50-0)	water, intermittent release	0,14 mg/L	
1-isopropyl-2,2-dimethyltrimethylene diisobutyrate (6846-50-0)	fresh water sediment	1,15 mg/kg	
1-isopropyl-2,2-dimethyltrimethylene diisobutyrate (6846-50-0)	marine water sediment	0,115 mg/kg	
1-isopropyl-2,2-dimethyltrimethylene diisobutyrate (6846-50-0)	soil	0,926 mg/kg	
1-isopropyl-2,2-dimethyltrimethylene diisobutyrate (6846-50-0)	water treatment plant	3 mg/L	

8.2. EXPOSURE CONTROLS

8.2.1. Appropriate engineering control

Substance/mixture related measures to prevent exposure during identified uses

Use good personal hygiene practices – wash hands at breaks and when done working with material. Avoid contact with eyes and skin. Do not breathe vapours/aerosols. Do not eat, drink or smoke while working. Handle in accordance with good industrial hygiene and safety practice.

Technical measures to prevent exposure

Provide good ventilation and local exhaust in areas with increased concentration.

8.2.2. Personal protective equipment

Eye and face protection

If there is risk of splashing into eyes, wear safety glasses with side shields (EN ISO 16321-1).

Hand protection

Protective gloves (EN 374).

Appropriate materials

Material	Thickness	Penetration Time	Remark
Nitrile	0,35 mm	480 min	

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Skin protection

Wear suitable protective clothing.

Respiratory protection

Not needed under normal use and adequate ventilation.

Thermal hazards

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8.2.3. Environmental exposure controls

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

-	Physical state:	liquid
-	Colour:	according to specification, beige, pigmented gray, black
-	Odour:	characteristic

Important health, safety and environmental information

-	pH	No information.
-	Melting point/freezing point	No information.
-	Initial boiling point/boiling range	No information.
-	Flash point	No information.
-	Evaporation rate	No information.
-	Flammability (solid, gas)	No information.
-	Explosion limits (vol%)	No information.
-	Vapour pressure	< 10 hPa at 50 °C
-	Vapour density	No information.
-	Density	Density: 1,30 – 1,60 g/cm ³ at 23 °C (IKM 4/24)
-	Solubility	Water: Insoluble Organic solvent: Soluble
-	Partition coefficient	No information.
-	Auto-ignition temperature	No information.
-	Decomposition temperature	No information.
-	Viscosity	Dynamic: 1500 – 1500000 mPas at 20 °C (*)
-	Explosive properties	No information.
-	Oxidising properties	No information.
-	Particle characteristics	No information.

9.2. OTHER INFORMATION

-	Remarks:	*The viscosity of particular product is given in technical data sheet.
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SECTION 10. STABILITY AND REACTIVITY

10.1. REACTIVITY

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10.2. CHEMICAL STABILITY

Product is stable under normal conditions of use, recommended handling and storage conditions.

10.3. POSSIBILITY OF HAZARDOUS REACTIONS

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10.4. CONDITIONS TO AVOID

No special precautions required. Consider the directions for use and storage.

10.5. INCOMPATIBLE MATERIALS

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10.6. HAZARDOUS DECOMPOSITION PRODUCTS

Under normal use conditions no hazardous decomposition products are expected. In case of fire/explosion vapours/gases that pose a health hazard are released.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. INFORMATION ON HAZARD CLASSES AS DEFINED IN REGULATION (EC) NO 1272/2008

(a) Acute toxicity

Name	Exposure route	Type	Species	Time	Value	Method	Remark
Propane-1,2-diol, propoxylated (25322-69-4)	oral	LD ₅₀	rat		500 – 2000 mg/kg		
Propane-1,2-diol, propoxylated (25322-69-4)	dermal	LD ₅₀	rat		> 2000 mg/kg		

(b) Skin corrosion/irritation

Name	Species	Time	Result	Method	Remark
Propane-1,2-diol, propoxylated (25322-69-4)	rabbit		No irritant effect.	OECD 404	

(c) Serious eye damage/irritation

Name	Species	Time	Result	Method	Remark
Propane-1,2-diol, propoxylated (25322-69-4)	rabbit		Mild irritating.	OECD 405, GLP	

(d) Respiratory or skin sensitisation

Name	Exposure route	Species	Time	Result	Method	Remark
Propane-1,2-diol, propoxylated (25322-69-4)	dermal	mouse		Non sensitising.	OECD 429 Skin Sensitisation: Local Lymph Node Assay	

(e) (Germ cell) mutagenicity

Name	Type	Species	Time	Result	Method	Remark
Propane-1,2-diol, propoxylated (25322-69-4)	in-vitro mutagenicity			Negative.	OECD 471 (EU B. 12/13)	Ames test

(f) Carcinogenicity

No information.

(g) Reproductive toxicity

No information.

Summary of evaluation of the CMR properties

No information.

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(h) STOT-single exposure

No information.

(i) STOT-repeated exposure

No information.

(j) Aspiration hazard

No information.

11.2. INFORMATION ON OTHER HAZARDS

11.2.1. Endocrine disrupting properties

No information.

11.2.2. Other information

No information.

SECTION 12. ECOLOGICAL INFORMATION

12.1. TOXICITY

12.1.1. Acute (short-term) toxicity

For components

Substance (CAS Nr.)	Type	Value	Exposure time	Species	Organism	Method	Remark
Propane-1,2-diol, propoxylated (25322-69-4)	LC ₅₀	> 100 mg/L	96 h	fish	<i>Poecilia reticulata</i>	OECD Guideline 203 (Fish, Acute Toxicity Test)	
	EC ₅₀	> 100 mg/L	96 h	crustacea	<i>Daphnia magna</i>	OECD 202	
	EC ₀	> 100 mg/L	72 h	algae	<i>Desmodesmus subspicatus</i>	OECD Guideline 201 (Alga, Growth Inhibition Test)	
	EC ₅₀	> 1000 mg/L	3 h	bacteria	Activated sludge	OECD 209 Activated Sludge, Respiration Inhibition Test	

12.1.2. Chronic (long-term) toxicity

No information.

12.2. PERSISTENCE AND DEGRADABILITY

12.2.1. Abiotic degradation, physical- and photo-chemical elimination

No information.

12.2.2. Biodegradation

For components

Substance (CAS Nr.)	Type	Rate	Time	Evaluation	Method	Remark
Propane-1,2-diol, propoxylated (25322-69-4)	aerobic	> 60 %	28 days	readily biodegradable	OECD 301 F	

12.3. BIOACCUMULATIVE POTENTIAL

12.3.1. Partition coefficient

No information.

12.3.2. Bioconcentration factor (BCF)

No information.

12.4. MOBILITY IN SOIL

12.4.1. Known or predicted distribution to environmental compartments

No information.

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12.4.2. Surface tension

No information.

12.4.3. Adsorption/Desorption

No information.

12.5. RESULTS OF PBT AND VPVB ASSESSMENT

No evaluation.

12.6. ENDOCRINE DISRUPTING PROPERTIES

No information.

12.7. ADDITIONAL INFORMATION

For product

Do not allow to reach ground water, water courses or sewage system.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. WASTE TREATMENT METHODS

13.1.1. Product / Packaging disposal

Waste chemical

Disposal must be made according to official regulations: to leave it to authorized collector/remover/transformer of waste.

Waste codes / waste designations according to LoW

08 04 10 - waste adhesives and sealants other than those mentioned in 080409

Packaging

Deliver completely emptied containers to approved waste disposal authorities.

Waste codes / waste designations according to LoW

15 01 - packaging (including separately collected municipal packaging waste)

13.1.2. Waste treatment-relevant information

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13.1.3. Sewage disposal-relevant information

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13.1.4. Other disposal recommendations

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SECTION 14. TRANSPORT INFORMATION

14.1. UN NUMBER OR ID NUMBER

Not applicable.

14.2. UN PROPER SHIPPING NAME

ADR, RID, IMDG, ADN, IATA: Not dangerous according to transport regulations.

14.3. TRANSPORT HAZARD CLASS(ES)

Not applicable.

14.4. PACKING GROUP

Not applicable.

14.5. ENVIRONMENTAL HAZARDS

NO.

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14.6. SPECIAL PRECAUTIONS FOR USER

Not applicable.

14.7. MARITIME TRANSPORT IN BULK ACCORDING TO IMO INSTRUMENTS

Not applicable.

SECTION 15. REGULATORY INFORMATION

15.1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (including last amendment Commission Regulation (EU) 2020/878)

- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

15.1.1. Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline)

Not applicable.

15.2. CHEMICAL SAFETY ASSESSMENT

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16. OTHER INFORMATION

Indication of changes

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Abbreviations and acronyms

ATE - Acute Toxicity Estimate
ADR - Agreement concerning the International Carriage of Dangerous Goods by Road
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CEN - European Committee for Standardisation
C&L - Classification and Labelling
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
CAS# - Chemical Abstracts Service number
CMR - Carcinogen, Mutagen, or Reproductive Toxicant
CSA - Chemical Safety Assessment
CSR - Chemical Safety Report
DMEL - Derived Minimal Effect Level
DNEL - Derived No Effect Level
DPD - Dangerous Preparations Directive 1999/45/EC
DSD - Dangerous Substances Directive 67/548/EEC
DU - Downstream User
EC - European Community
ECHA - European Chemicals Agency
EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS)
EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway)
EEC - European Economic Community
EINECS - European Inventory of Existing Commercial Substances
ELINCS - European List of notified Chemical Substances
EN - European Standard
EQS - Environmental Quality Standard
EU - European Union
Euphrac - European Phrase Catalogue
EWC - European Waste Catalogue (replaced by LoW – see below)
GES - Generic Exposure Scenario
GHS - Globally Harmonized System
IATA - International Air Transport Association
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air

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IMDG - International Maritime Dangerous Goods
IMSBC - International Maritime Solid Bulk Cargoes
IT - Information Technology
IUCLID - International Uniform Chemical Information Database
IUPAC - International Union for Pure Applied Chemistry
JRC - Joint Research Centre
Kow - octanol-water partition coefficient
LC₅₀ - Lethal Concentration to 50 % of a test population
LD₅₀ - Lethal Dose to 50% of a test population (Median Lethal Dose)
LE - Legal Entity
LoW - List of Wastes (see <http://ec.europa.eu/environment/waste/framework/list.htm>)
LR - Lead Registrant
M/I - Manufacturer / Importer
MS - Member States
MSDS - Material Safety Data Sheet
OC - Operational Conditions
OECD - Organization for Economic Co-operation and Development
OEL - Occupational Exposure Limit
OJ - Official Journal
OR - Only Representative
OSHA - European Agency for Safety and Health at work
PBT - Persistent, Bioaccumulative and Toxic substance
PEC - Predicted Effect Concentration
PNEC(s) - Predicted No Effect Concentration(s)
PPE - Personal Protection Equipment
(Q)SAR - Qualitative Structure Activity Relationship
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
RIP - REACH Implementation Project
RMM - Risk Management Measure
SCBA - Self-Contained Breathing Apparatus
SDS - Safety data sheet
SIEF - Substance Information Exchange Forum
SME - Small and Medium sized Enterprises
STOT - Specific Target Organ Toxicity
(STOT) RE - Repeated Exposure
(STOT) SE - Single Exposure
SVHC - Substances of Very High Concern
UN - United Nations
vPvB - Very Persistent and Very Bioaccumulative

Key literature references and sources for data

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List of relevant H phrases

H290 May be corrosive to metals.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.

The information of this SDS is based on the present state of our knowledge and meets the requirements of EU and national laws. The user's working conditions however, are beyond our knowledge and control. The product is not to be used for purposes other than those specified under Section 1 without a written permission. It remains the responsibility of the user to ensure that the necessary steps are taken to meet the laws and regulations. Handling of the product may only be done by people above 18 years of age, who are satisfactorily informed of how to do the work, the hazardous properties and necessary safety precautions. The information given in this SDS is to describe the product only in terms of health and safety requirements and should not, therefore, be construed as guaranteeing specific properties.