SAFETY DATA SHEET ACCORDING TO REGULATION (EC) 1907/2006

Product name: Stonder 1K Epoxy Primer Spray

Creation date: 13.03.2023, Revision: 13.03.2023, version: 2.0

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

1.1 Product identifier

Product name

Stonder 1K Epoxy Primer Spray

Product code

[80886 UFI:PGCM-V9F4-1R02-A9G3]

https://my.chemius.net/p/cTWRsI/en/pd/en

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

Relevant identified uses

Primer. Aerosol.

Uses advised against

Do not use for purposes other than those prescribed.

1.3 Details of the supplier of the safety data sheet

Supplier

Rags LTD
Džūkstes str.1
LV-1004 Riga, Latvia
+37167808780
rags&rags.lv

1.4 Emergency Telephone Number

Emergency

112

Supplier

+37167808780

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Aerosol 1; H222 + H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
Skin Irrit. 2; H315 Causes skin irritation.
Eye Irrit. 2; H319 Causes serious eye irritation.
STOT SE 3; H336 May cause drowsiness or dizziness.
Aquatic Chronic 2; H411 Toxic to aquatic life with long lasting effects.

2.2 Label elements

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

Signal word: DANGER

H222 + H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403 Store in a well-ventilated place.
P410 + P412 Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122°F.
P501 Dispose of contents/container in accordance with national regulation.

Contains:
acetone
butanone
xylene
1-methoxy-2-propanol
reaction mass of ethylbenzene and m-xylene and p-xylene

2.3 Other hazards

PBT/vPvB
No information.

Endocrine disrupting properties
No information.

Additional information
No information.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

For mixtures see 3.2.

3.2 Mixtures

Name	CAS EC Index Reach	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Conc. Limits	Notes for substances
dimethyil ether	115-10-6 204-065-8 603-019-00-8 01-2119472128-37	25-<50	Flam. Gas 1; H220 Press. Gas; H280	/	/

acetone	67-64-1 200-662-2 606-001-00-8	10-<25	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 EUH066	/	/
butanone	78-93-3 201-159-0 606-002-00-3	10-<25	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 EUH066	/	/
xylene	1330-20-7 215-535-7 601-022-00-9	2,5-<10	Flam. Liq. 3; H226 Asp. Tox. 1; H304 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Acute Tox. 4; H332 STOT SE 3; H335 STOT RE 2; H373	/	C
1-methoxy-2-propanol	107-98-2 203-539-1 603-064-00-3	2,5-<10	Flam. Liq. 3; H226 STOT SE 3; H336	/	/
trizinc bis(orthophosphate)	7779-90-0 231-944-3 030-011-00-6	2,5-<10	Aquatic Acute 1; H400; M = 1 Aquatic Chronic 1; H410; M = 1	/	/
reaction mass of ethylbenzene and m-xylene and p-xylene	- 905-562-9 - 01-2119555267-33	2,5-<10	Flam. Liq. 3; H226 Asp. Tox. 1; H304 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Acute Tox. 4; H332 STOT SE 3; H335 STOT RE 2; H373	/	/

Notes for substances

C	Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General notes

Never give anything by mouth to an unconscious person. Place patient in recovery position and ensure airway patency. When in doubt or if feeling unwell seek medical assistance. Show the safety data sheet and label to the physician. No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. When it is suspected, that there may still be harmful vapours/fumes present in the air, respiratory protection (mask; self contained breathing apparatus) must be used. Wash contaminated clothing with water before removing or use gloves.

Following inhalation

Remove patient to fresh air - move out of dangerous area. In case of unconsciousness bring patient into stable side position and seek medical attention. If breathing is irregular or respiratory arrest occurs provide artificial respiration. Keep at rest in a position comfortable for breathing. Seek medical help immediately.

Following skin contact

Take off all contaminated clothing. Areas of the body that have come into contact with the product must be rinsed with water. Consult a physician.

Following eye contact

Immediately flush eyes with running water, keeping eyelids apart. Seek medical help.

Following ingestion

Do not induce vomiting! Aspiration hazard if swallowed. Can enter lungs and cause damage. If vomiting occurs, the

patient should hold the head lower than the hips, because it reduces the possibility of aspiration. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Immediately consult a doctor. Show the physician the safety data sheet or label.

4.2 Most important symptoms and effects, both acute and delayed

Following inhalation

Can cause irritation of respiratory system. Coughing, sneezing, nasal discharge, labored breathing. Vapours may cause drowsiness and dizziness.

Following skin contact

Itching, redness, pain.

Following eye contact

Redness, tearing, pain.

Following ingestion

Ingestion is unlikely because it is an aerosol. Accidental ingestion: May cause nausea/vomiting and diarrhea. May cause abdominal discomfort. Irritates mucous membranes in the mouth, throat, esophagus and in gastrointestinal area. Aspiration into the lungs causes coughing, shortness of breath and may lead to chemical pneumonia.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. After the product has been ingested vomiting can cause aspiration into the lungs. Because of the risk of aspiration, induction of vomiting and gastric lavage should be avoided.

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 a fire toxic gases can be generated; do not inhale gases/smoke.

5.3 Advice for firefighters

Protective actions

In case of fire or heating do not breathe fumes/vapours. No action shall be taken involving any personal risk or without suitable training. Prolonged heating can cause an explosion. Vapours can form explosive mixtures with air. In case of fire aerosols can explode and be propelled to considerable distances in different directions. Cool containers at risk with water spray. If possible remove containers from endangered area.

Special protective equipment for fire-fighters

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

Additional information

Contaminated firefighting water and fire residues must be disposed of in accordance with the local regulations.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment
No information.

Precautionary measures
Ensure adequate ventilation. Keep away from sources of ignition and/or heat; No smoking!

Emergency procedures
No action shall be taken involving any personal risk or without suitable training. Prevent access to unprotected personnel. Evacuate the danger zone. Do not breathe vapour or mist. Avoid contact with skin, eyes and clothing.

For emergency responders
Use personal protective equipment.

6.2 Environmental precautions

The product is an aerosol, which is why leakage of large amounts of product is not expected. Do not allow product to reach water/drains/sewage systems or permeable soil. In case of release into the environment, inform the relevant authorities.

6.3 Methods and material for containment and cleaning up

For containment
Stem the spill if this does not pose risks.

For cleaning up
Collect the spray cans and hand them over to an authorized waste disposal contractor. Release of liquid because of damaged aerosol can (release of large quantities): Absorb product (with inert material), collect it in special container and dispose it to a licensed hazardous-waste disposal contractor. Use only explosion-proof instruments and equipment. Use spark-proof tools. Prevent release into the sewer, water, basements or confined areas. Ventilate the premises. Clean contaminated area with plenty of water.

OTHER INFORMATION
No information.

6.4 Reference to other sections

See also sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures
Measures to prevent fire
Ensure adequate ventilation. Keep away from sources of ignition - no smoking. Use spark-proof tools. Take precautionary measures against static discharges. Vapours are heavier than air and spread along the floor. They form explosive mixtures with air. Pressurized container; protect from sunlight and do not expose to tempratures exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or incandescent material.

Measures to prevent aerosol and dust generation
Use general or local exhaust ventilation to prevent inhaling vapours and aerosols.

Measures to protect the environment
Do not discharge into drains, surface water and soil. After use immediately close container tightly.

Other measures
No information.

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. Avoid contact with skin, eyes and clothes. Remove contaminated clothes and wash them before reuse. Wear suitable protective equipment; see Section 8.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep in a cool, dry and well ventilated place. Protect from open fire, heat and direct sunlight. Keep away from food, drink and animal feeding stuffs. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Follow safe storage practices for packed compressed gas as described by the Compressed Gas Association or the relevant agency in the country where the product is used. Keep away from oxidising substances. Keep away from sources of ignition - no smoking.

Packaging materials

Store only in original container.

Requirements for storage rooms and vessels

Close opened containers after use. Put the containers upright to prevent from leaking. Do not store in unlabelled containers.

Storage class

No information.

Further information on storage conditions

No information.

7.3 Specific end use(s)

Recommendations

No information.

Industrial sector specific solutions

No information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure limit values

Name	mg/m^3	ml/m^3	Short-term value mg/m^3	Short-term value ml/m^3	Remark	Biological Tolerance Values
Butan-2-one (methyl ethyl ketone) (78-93-3)	600	200	899	300	Sk, BMGV	70 µmol butan-2-one/L in urine - Post shift 70 µmol butan-2-one/L in urine - Post shift
Xylene, o-,m-,p- or mixed isomers (1330-20-7)	220	50	441	100	Sk, BMGV	650 mmol methyl hippuric acid/mol creatinine in urine - Post shift 650 mmol methyl hippuric acid/mol creatinine in urine - Post shift 650 mmol methyl hippuric acid/mol creatinine in urine - Post shift
1-Methoxypropan-2-ol (107-98-2)	375	100	560	150	Sk	/
Acetone (67-64-1)	1210	500	3620	1500	/	/
Dimethyl ether (115-10-6)	766	400	958	500	/	/

Information on monitoring procedures

BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 689:2018 Workplace exposure. Measurement of exposure by inhalation to chemical agents. Strategy for testing compliance with occupational exposure limit values. BS EN 482:2021 Workplace exposure. Procedures for the determination of the concentration of chemical agents. Basic performance requirements.

DNEL/DMEL values

For product

No information.

For components

Name	Type	Exposure route	exp. frequency	Remark	value
dimethyil ether	Worker	inhalation	long term systemic effects	/	1894 mg/m³
dimethyil ether	Consumer	inhalation	long term systemic effects	/	471 mg/m³
butanone	Consumer	oral	long term systemic effects	/	mg/kg
butanone	Consumer	dermal	long term systemic effects	/	mg/kg
butanone	Worker	dermal	long term systemic effects	/	mg/kg
butanone	Consumer	inhalation	long term systemic effects	/	mg/m³
butanone	Worker	inhalation	long term systemic effects	/	mg/m³
1-methoxy-2-propanol	Worker	inhalation	long term systemic effects	/	369 mg/m³
1-methoxy-2-propanol	Worker	inhalation	short term systemic effects	/	553.5 mg/m³
1-methoxy-2-propanol	Worker	inhalation	short term local effects	/	553.5 mg/m³
1-methoxy-2-propanol	Worker	dermal	long term systemic effects	/	183 mg/kg bw/day
1-methoxy-2-propanol	Consumer	inhalation	long term systemic effects	/	43.9 mg/m³
1-methoxy-2-propanol	Consumer	dermal	long term systemic effects	/	78 mg/kg bw/day
1-methoxy-2-propanol	Consumer	oral	long term systemic effects	/	33 mg/kg bw/day

PNEC values

For product

No information.

For components

Name	Exposure route	Remark	value
dimethyil ether	fresh water	/	0.155 mg/L
dimethyil ether	water, intermittent release	fresh water	1.549 mg/L
dimethyil ether	marine water	/	0.016 mg/L
dimethyil ether	water treatment plant	/	160 mg/L
dimethyil ether	fresh water sediment	dry weight	0.681 mg/kg
dimethyil ether	marine water sediment	dry weight	0.069 mg/kg
dimethyil ether	soil	dry weight	0.045 mg/kg
butanone	fresh water	/	mg/L
butanone	marine water	/	mg/L
butanone	water treatment plant	/	mg/L
butanone	marine water sediment	/	mg/kg
butanone	fresh water sediment	/	mg/kg
butanone	soil	/	mg/kg
butanone	food chain	food	mg/kg
1-methoxy-2-propanol	fresh water	/	10 mg/L
1-methoxy-2-propanol	water, intermittent release	/	100 mg/L
1-methoxy-2-propanol	marine water	/	1 mg/L
1-methoxy-2-propanol	water treatment plant	/	100 mg/L
1-methoxy-2-propanol	fresh water sediment	dry weight	52.3 mg/kg
1-methoxy-2-propanol	marine water sediment	dry weight	5.2 mg/kg
1-methoxy-2-propanol	soil	dry weight	4.59 mg/kg

8.2 Exposure controls

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. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothes. Do not eat, drink or smoke while working. Do not breathe vapours/aerosols.

Structural measures to prevent exposure

No information.

Organisational measures to prevent exposure

Remove all contaminated clothes immediately and wash them before reuse.

Technical measures to prevent exposure

Provide good ventilation and local exhaust in areas with increased concentration. Keep away from food, drink and animal feeding stuffs.

Personal protective equipment

Eye and face protection

Safety glasses with side protection (BS EN ISO 16321-1:2022).

Hand protection

Protective gloves (EN 374). Observe the manufacturer's instructions regarding the use, storage, maintenance and replacement of gloves. In case of damage or at the first signs of wear and tear, change the gloves immediately. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. The penetration time is determined by the protective glove manufacturer and must be observed.

Appropriate materials

Skin protection

Protective antistatic clothing EN 1149 (1:2006, 2:1998 and 3:2004, 5:2008), protective antistatic shoes (EN 20345:2012). At high risk of skin exposure chemical suits (BS EN ISO 6530:2005) and boots may be required (BS EN ISO 20345:2022).

Respiratory protection

In case of insufficient ventilation wear suitable respiratory protection. Wear suitable protective breathing mask (EN 136) with filter A2-P2 (EN 14387). For dust/gas/ vapor concentrations above the applicable filter limit, in case of oxygen concentrations below 17% or in vague conditions, autonomous self-contained breathing apparatus should be used, according to standard BS EN 137, BS EN 138.

Thermal hazards

No information.

Environmental exposure controls

Substance/mixture related measures to prevent exposure

No information.

Instruction measures to prevent exposure

No information.

Organisational measures to prevent exposure

No information.

Technical measures to prevent exposure

Do not allow product to reach drains, sewage systems or ground water.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state

liquid - aerosol

Colour

grey

Odour

solvent like

Important health, safety and environmental information

Odour threshold	No information.

Melting point/Freezing point	No information.
Boiling point or initial boiling point and boiling range	-24.8 °C
Flammability	No information.
Lower and upper explosion limit	0.7 vol % 20 vol %
Flash point	-42 °C
Auto-ignition temperature	235 °C
Decomposition temperature	No information.
pH	No information.
Viscosity	No information.
Solubility	No information.
Partition coefficient	No information.
Vapour pressure	5200 hPa at 20 °C
Density and/or relative density	Density: 0.91 g/cm^3
Relative vapour density	No information.
Particle characteristics	No information.

9.2 OTHER INFORMATION

Solids content	28.5
Weight organic solvents	71.2 %
Explosive properties	No information.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No information.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

Vapours and air can form flammable or explosive mixtures.

10.4 Conditions to avoid

Pressurized container; protect from sunlight and do not expose to tempratures exceeding 50°C. Do not pierce or burn, even after use. Protect from heat, direct sunlight, open fire, sparks.

10.5 Incompatible materials

Oxidants.

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

For components

Name	Exposure route	Type	Species	Time	value	Method	Remark
dimethyil ether	Inhalation (gases)	LC_{50}	rat	4 h	309 mg/l	/	/
acetone	oral	LD_{50}	rat	/	5800 mg/kg	/	/
acetone	dermal	LD_{50}	rabbit	/	20000 mg/kg	/	/
butanone	dermal	LD_{50}	rabbit	/	6480 mg/kg	/	/
butanone	oral	LD_{50}	rat	/	2737 mg/kg	/	/
butanone	inhalation	LC_{50}	rat	4 h	34 mg/l	/	vapour
xylene	dermal	LD_{50}	rabbit	/	1700 mg/kg	/	/
xylene	oral	LD_{50}	rat	/	5000 mg/kg	/	/
xylene	inhalation	LC_{50}	rat	4 h	4500 ppm	/	/
1-methoxy-2-propanol	inhalation	LC_{50}	rat	6 h	27596 mg/l	/	/
1-methoxy-2-propanol	oral	LD_{50}	rat	/	4016 mg/kg	/	/
1-methoxy-2-propanol	dermal	LD_{50}	rabbit	/	> 2000 mg/l	/	/
trizinc bis(orthophosphate)	oral	LD_{50}	rat	/	> 5000 mg/kg	Wistar Wistar	/
trizinc bis(orthophosphate)	inhalation	LC_{50}	rat	4 h	> 5.7 mg/l	/	/

Additional information

The product is not classified for acute toxicity.

(b) Skin corrosion/irritation

For components

Name	Species	Time	result	Method	Remark
dimethyil ether	/	/	May cause frostbite.	/	/
butanone	/	/	Irritating.	/	/

Additional information

Causes skin and eye irritation.

(c) Serious eye damage/irritation

For components

Name	Exposure route	Species	Time	result	Method	Remark
butanone	/	/	/	Irritating.	/	/

(d) Respiratory or skin sensitisation

For components

Name	Exposure route	Species	Time	result	Method	Remark
butanone	dermal	guinea pig	/	Non sensitising.	Maximisation test	/

Additional information

The product is not classified as sensitising.

(e) (Germ cell) mutagenicity

For components

Name	Type	Species	Time	result	Method	Remark
dimethyil ether	/	/	/	The chemical is not classified as mutagenic.	/	/

dimethyil ether	in-vitro mutagenicity	/	/	Negative.	OECD 471	Ames test
dimethyil ether	in-vitro mutagenicity	Human (lymphocytes)	/	Negative.	cytogenetic test	OECD 473
dimethyil ether	in-vivo mutagenicity	*Drosophila melanogaster*	/	Negative.	OECD 477	/
butanone	/	Bacteria	/	Negative with metabolic activation, negative without metabolic activation.	OECD 471 (EU B. 12/13)	/

(f) Carcinogenicity

For components

Name	Exposure route	Type	Species	Time	value	result	Method	Remark
dimethyil ether	/	/	/	/	/	Substance is not classified as carcinogenic.	/	/
dimethyil ether	inhalation (vapours)	NOAEL	rat	2 years	47 mg/l	Animal testing did not show any carcinogenic effects.	OECD 453	/
butanone	/	/	/	/	/	negative	/	/

(g) Reproductive toxicity

For components

Name	Reproductive toxicity type	Type	Species	Time	value	result	Method	Remark
dimethyil ether	Reproductive toxicity	inhalation	rat	/	47 mg/L	Animal testing did not show any effects on fertility.	OECD 452	/
dimethyil ether	Maternal toxicity	NOAEL	rat	/	5000 ppm	/	/	Inhalation
dimethyil ether	Teratogenicity	NOAEL	rat	/	40000 ppm	/	/	Inhalation
dimethyil ether	Developmental toxicity	NOAEL	rat	/	40000 ppm	/	/	Inhalation
dimethyil ether	-	NOAEL	rat	/	20000 ppm	/	OECD 414	inhalation (vapor), embryo-fetal development
butanone	Developmental toxicity	NOAEC	rat	18 days	1002 ppm	No effect	OECD 414	7 h/day, experimental value
butanone	Developmental toxicity	LOAEC	rat	18 days	3000 ppm	Decrease in body weight	OECD 414	7 h/day, experimental value

Summary of evaluation of the CMR properties

The product is not classified as carcinogenic, mutagenic or toxic for reproduction.

(h) STOT-single exposure

For components

Name	Exposure route	Type	Species	Time	Exposure	organ	value	result	Method	Remark
reaction mass of ethylbenzene and m-xylene and p-xylene	inhalation	-	/	/	/	/	/	May cause respiratory irritation.	/	/

Additional information

May cause drowsiness or dizziness. May cause respiratory irritation.

(i) STOT-repeated exposure

For components

Name	Exposure route	Type	Species	Time	Exposure	organ	value	result	Method	Remark
dimethyil ether	Repeated dose toxicity	NOEL	rat	2 years	/	/	47 mg/L	/	OECD 452	inhalation
butanone	inhalation	LOAEL	rat	90 days	/	/	5000 ppm	/	/	6 h per day, 5 days per week
butanone	inhalation	NOAEL	rat	90 days	/	/	2500 ppm	/	/	6 h per day, 5 days per week

Additional information

May cause damage to organs through prolonged or repeated exposure.

(j) Aspiration hazard

For components

Name	result	Method	Remark
dimethyil ether	Aspiration hazard: Not Classified.	/	/

Additional information

May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

No information.

Interactive effects

No information.

11.2 Information on other hazards

Endocrine disrupting properties

No information.

Other information

No information.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Acute (short-term) toxicity

For components

Name	Type	value	Exposure time	Species	organism	Method	Remark
dimethyil ether	LC_{50}	4.1 mg/L	96 h	fish	*Poecilia reticulata*	/	Semi-Static system
dimethyil ether	EC_{50}	4.4 mg/L	48 h	crustacea	*Daphnia magna*	/	static test
dimethyil ether	LC_{50}	755.5 mg/L	48 h	*Daphnia*	/	ECOSAR	/
dimethyil ether	EC_{50}	154.9 mg/L	96 h	algae	/	ECOSAR	/
dimethyil ether	EC_{10}	> 1600 mg/L	/	bacteria	*Pseudomonas putida*	/	static test
xylene	EC_{50}	7.4 mg/L	48 h	crustacea	*Daphnia magna*	/	/
1-methoxy-2-propanol	LC_{50}	6812 mg/L	96 h	fish	*Leuciscus idus*	/	/
1-methoxy-2-propanol	IC_{50}	1000 mg/L	3 h	microorganisms	Activated sludge	/	/
1-methoxy-2-propanol	EC_{50}	23300 mg/L	48	crustacea	*Daphnia magna*	/	/
trizinc bis(orthophosphate)	LC_{50}	0.78 mg/L	96 h	fish	*Pimephales promelas*	/	/

trizinc bis(orthophosphate)	EC_{50}	0.86 mg/L	48 h	crustacea	*Daphnia magna*	/	/
reaction mass of ethylbenzene and m-xylene and p-xylene	LC_{50}	> 1.3 mg/L	/	fish	/	/	/

Chronic (long-term) toxicity

For components

Name	Type	value	Exposure time	Species	organism	Method	Remark
1-methoxy-2-propanol	EC50	> 1000 mg/l	7 days	algae	*Pseudokirchneriella subcapitata*	/	/

12.2 Persistence and degradability

Abiotic degradation, physical- and photo-chemical elimination

For components

Name	Environment	Type / Method	Half Time	Evaluation	Method	Remark
1-methoxy-2-propanol	Air	photodegradation	3.1 h	*Translation required (73447)*	/	/

Biodegradation

For components

Name	Type	Rate	Time	Evaluation	Method	Remark
dimethyil ether	aerobic	5 %	28 days	not readily biodegradable	OECD 301 D	activated sludge
1-methoxy-2-propanol	biodegradability	96 %	28 days	readily biodegradable	OECD 301 E	/
trizinc bis(orthophosphate)	Water solubility	2.7 mg/L	/	/	/	/
reaction mass of ethylbenzene and m-xylene and p-xylene	BOD	57 - 80 g O_2/g	/	/	/	/

12.3 Bioaccumulative potential

Partition coefficient

No information.

Bioconcentration factor (BCF)

For components

Name	Species	organism	value	Duration	Evaluation	Method	Remark
1-methoxy-2-propanol	BCF	/	3.2	/	/	/	/
1-methoxy-2-propanol	BCF	/	/	/	Bioaccumulation is not expected.	/	/

12.4 Mobility in soil

Known or predicted distribution to environmental compartments

No information.

Surface tension

No information.

Adsorption/Desorption

For components

Name	Type	Criterion	value	Evaluation	Method	Remark
dimethyil ether	Soil	/	/	Moderate mobility in soil.	/	/

1-methoxy-2-propanol	Soil	log KOC	1 - 50	High mobility in soil.	/	/

12.5 Results of PBT and vPvB assessment

No evaluation.

12.6 Endocrine disrupting properties

No information.

12.7 Other adverse effects

No information.

12.8 Additional information

For product

Toxic to aquatic organisms: may cause long-term adverse effects in the aquatic environment. Do not allow to reach ground water, water courses or sewage system.

For components

dimethyil ether

Bioaccumulation is not expected. This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product / Packaging disposal

Waste chemical

Do not allow product to reach drains/sewage systems. Disposal must be made according to official regulations: deliver it to authorised collector/remover/transformer of hazardous waste.

Waste codes / waste designations according to LoW

No information.

Packaging

Deliver completely emptied containers to approved waste disposal authorities. Uncleaned containers are classified as hazardous waste - they should be handled in the same manner as the contents. Uncleaned containers should not be perforated, cut or welded. Empty containers represent a fire hazard as they may contain flammable product residues and vapour.

Waste codes / waste designations according to LoW

No information.

Waste treatment-relevant information

No information.

Sewage disposal-relevant information

No information.

Other disposal recommendations

No information.

SECTION 14: TRANSPORT INFORMATION

ADR/RID	IMDG	IATA	ADN
14.1 UN number or ID number			
UN 1950	UN 1950	UN 1950	UN 1950
14.2 UN proper shipping name			
AEROSOLS	AEROSOLS	AEROSOLS	AEROSOLS
14.3 Transport hazard class(es)			
2	2	2	2
			
14.4 Packing group			
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable
14.5 Environmental hazards			
YES	Marine pollutant	YES	YES
14.6 Special precautions for user			
Limited quantities 1 L Special provisions 190, 327, 344, 625 Packing Instructions P207, LP200 Special packing provisions PP87, RR6, L2 Transport category 2 Tunnel restriction code (D)	Limited quantities 1 L EmS F-D, S-U Flash point -42 °C	Limited Quantity, Packing Instructions (Ltd Qty, Pkg Inst) Y203 Limited Quantity, Maximum Net Quantity/Package (Ltd Qty, Max Net Qty/Pkg) 30 kg G Packing Instructions (Pkg Inst) 203 Maximum Net Quantity/Package (Max Net Qty/Pkg) 25 kg Special provisions A145, A167, A802	Limited quantities 1 L
14.7 Maritime transport in bulk according to IMO instruments			
	Goods may not be carried in bulk in bulk containers, containers or vehicles.		

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

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

not applicable

Regulation EC 648/2004 on detergents

No information.

Special instructions

Observe the regulations on employment and protection against dangerous substances for young people, pregnant women and nursing mothers.

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

1.2 Relevant identified uses of the substance or mixture and uses advised against 2.2 Label elements

Key literature references and sources for data

No information.

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
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

List of relevant H phrases

H220 Extremely flammable gas.
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H280 Contains gas under pressure; may explode if heated.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.