

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

Product name: Stonder Primer Grey Spray

Creation date: 15.03.2023, Revision: 15.05.2023, version: 1.0

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

1.1 Product identifier

Product name

Stonder Primer Grey Spray

Product code

[80108 UFU:UNU4-W7UQ-900N-5TS4]



<https://my.chemius.net/p/uLpy6s/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.

Eye Irrit. 2; H319 Causes serious eye irritation.

STOT SE 3; H336 May cause drowsiness or dizziness.

Aquatic Chronic 3; H412 Harmful 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.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P503 Refer to manufacturer/supplier/... for information on disposal/recovery/recycling

Contains:

acetone

n-butyl acetate

2-methoxy-1-methylethyl acetate

titanium dioxide

butan-1-ol

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 Concentration Limits	Notes for substances
acetone	67-64-1 200-662-2 606-001-00-8	25-<50	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 EUH066	/	/
n-butyl acetate	123-86-4 204-658-1 607-025-00-1	10-<12,5	Flam. Liq. 3; H226 STOT SE 3; H336 EUH066	/	/
propane	74-98-6 200-827-9 -	10-<12,5	Flam. Gas 1; H220 Press. Gas; H280	/	/
isobutane (containing <0,1% butadiene (203-450-8))	75-28-5 200-857-2 601-004-00-0	5-<10	Flam. Gas 1; H220 Press. Gas; H280	/	C, S

2-methoxy-1-methylethyl acetate	108-65-6 203-603-9 607-195-00-7	5-<10	Flam. Liq. 3; H226 STOT SE 3; H336	/	/
butane (containing <0,1 % butadiene)	106-97-8 203-448-7 -	5-<10	Flam. Gas 1; H220 Press. Gas; H280	/	/
titanium dioxide	13463-67-7 236-675-5 022-006-00-2	2.5-<5	Carc. 2; H351	/	10, V, W
trizinc bis(orthophosphate)	7779-90-0 231-944-3 030-011-00-6	1-<2.5	Aquatic Acute 1; H400; M = 1 Aquatic Chronic 1; H410; M = 1	/	/
cellulose nitrate	9004-70-0 - -	1-<2.5	Expl. 1.1; H201	/	/
butan-1-ol	71-36-3 200-751-6 603-004-00-6	1-<2.5	Flam. Liq. 3; H226 Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335 STOT SE 3; H336	/	/

Notes for substances

10	The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter $\leq 10 \mu\text{m}$.
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.
S	This substance may not require a label according to Article 17 (see Section 1.3 of Annex I) (Table 3).
V	If the substance is to be placed on the market as fibres (with diameter $< 3 > 5 \mu\text{m}$ and aspect ratio $\geq 3:1$) or particles of the substance fulfilling the WHO fibre criteria or as particles with modified surface chemistry, their hazardous properties must be evaluated in accordance with Title II of this Regulation, to assess whether a higher category (Carc. 1B or 1A) and/or additional routes of exposure (oral or dermal) should be applied.
W	It has been observed that the carcinogenic hazard of this substance arises when respirable dust is inhaled in quantities leading to significant impairment of particle clearance mechanisms in the lung. This note aims to describe the particular toxicity of the substance; it does not constitute a criterion for classification according to this Regulation.

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. Wash contaminated clothing with water before removing or use gloves.

Following inhalation

Remove patient to fresh air - move out of dangerous area. Obtain professional medical help!

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. If symptoms develop and persist, seek medical attention.

Following eye contact

Immediately flush eyes with running water, keeping eyelids apart. If irritation persists, seek professional medical attention.

Following ingestion

Do not induce vomiting! Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Consult a physician. Show the physician the safety data sheet or label.

4.2 Most important symptoms and effects, both acute and delayed

Following inhalation

Excessive exposure to spray mist, fog, or vapours may cause respiratory irritation. Vapours may cause drowsiness and dizziness.

Following skin contact

Contact with skin may cause irritation (redness, itching). Repeated exposure may cause dry skin or cracked skin.

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.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

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 temperatures 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. Avoid exposure - obtain special instructions before using.

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
Butane (106-97-8)	1450	600	1810	750	Carc, (only applies if Butane contains more than 0.1% of buta-1,3-diene)	/
1-Methoxypropyl acetate (108-65-6)	274	50	548	100	Sk	/
Acetone (67-64-1)	1210	500	3620	1500	/	/
Butan-1-ol (71-36-3)	/	/	154	50	Sk	/
Butyl acetate (123-86-4)	724	150	966	200	/	/
Titanium dioxide respirable (13463-67-7)	4	/	/	/	/	/
Titanium dioxide total inhalable (13463-67-7)	10	/	/	/	/	/

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
n-butyl acetate	Worker	inhalation	long term systemic effects	/	300 mg/m ³
n-butyl acetate	Worker	inhalation	short term systemic effects	/	600 mg/m ³
n-butyl acetate	Worker	inhalation	long term local effects	/	300 mg/m ³
n-butyl acetate	Worker	inhalation	short term local effects	/	600 mg/m ³
n-butyl acetate	Worker	dermal	long term systemic effects	/	11 mg/kg bw/day
n-butyl acetate	Worker	dermal	short term systemic effects	/	11 mg/kg bw/day
n-butyl acetate	Consumer	inhalation	long term systemic effects	/	35.7 mg/m ³
n-butyl acetate	Consumer	inhalation	short term systemic effects	/	300 mg/m ³
n-butyl acetate	Consumer	inhalation	long term local effects	/	35.7 mg/m ³
n-butyl acetate	Consumer	inhalation	short term local effects	/	300 mg/m ³
n-butyl acetate	Consumer	dermal	long term systemic effects	/	6 mg/kg bw/day
n-butyl acetate	Consumer	dermal	short term systemic effects	/	6 mg/kg bw/day
n-butyl acetate	Consumer	oral	long term systemic effects	/	2 mg/kg bw/day
n-butyl acetate	Consumer	oral	short term systemic effects	/	2 mg/kg bw/day
2-methoxy-1-methylethyl acetate	Worker	inhalation	long term systemic effects	/	275 mg/m ³
2-methoxy-1-methylethyl acetate	Worker	inhalation	short term local effects	/	550 mg/m ³
2-methoxy-1-methylethyl acetate	Worker	dermal	long term systemic effects	/	796 mg/kg bw/day
2-methoxy-1-methylethyl acetate	Consumer	inhalation	long term systemic effects	/	33 mg/m ³
2-methoxy-1-methylethyl acetate	Consumer	inhalation	long term local effects	/	33 mg/m ³
2-methoxy-1-methylethyl acetate	Consumer	dermal	long term systemic effects	/	320 mg/kg bw/day
2-methoxy-1-methylethyl acetate	Consumer	oral	long term systemic effects	/	36 mg/kg bw/day
2-methoxy-1-methylethyl acetate	Consumer	oral	short term systemic effects	/	500 mg/kg bw/day
titanium dioxide	Worker	inhalation	long term local effects	/	1.25 mg/m ³
titanium dioxide	Consumer	inhalation	long term local effects	/	210 µg/m ³
butan-1-ol	Worker	inhalation	long term local effects	/	mg/m ³
butan-1-ol	Consumer	inhalation	long term systemic effects	/	mg/m ³
butan-1-ol	Consumer	inhalation	long term local effects	/	mg/m ³
butan-1-ol	Consumer	dermal	long term systemic effects	/	mg/kg bw/day
butan-1-ol	Consumer	oral	long term systemic effects	/	mg/kg bw/day

PNEC values

For product

No information.

For components

Name	Exposure route	Remark	value
n-butyl acetate	fresh water	/	0.18 mg/L
n-butyl acetate	water, intermittent release	/	0.36 mg/L
n-butyl acetate	marine water	/	0.018 mg/L

n-butyl acetate	water treatment plant	/	35.6 mg/L
n-butyl acetate	fresh water sediment	dry weight	0.981 mg/kg
n-butyl acetate	marine water sediment	dry weight	0.098 mg/kg
n-butyl acetate	soil	dry weight	0.09 mg/kg
2-methoxy-1-methylethyl acetate	fresh water	/	0.635 mg/L
2-methoxy-1-methylethyl acetate	water, intermittent release	/	6.35 mg/L
2-methoxy-1-methylethyl acetate	marine water	/	0.064 mg/L
2-methoxy-1-methylethyl acetate	water treatment plant	/	100 mg/L
2-methoxy-1-methylethyl acetate	fresh water sediment	dry weight	3.29 mg/kg
2-methoxy-1-methylethyl acetate	marine water sediment	dry weight	0.329 mg/kg
2-methoxy-1-methylethyl acetate	soil	dry weight	0.29 mg/kg
butan-1-ol	fresh water	/	mg/L
butan-1-ol	water, intermittent release	fresh water	mg/L
butan-1-ol	marine water	/	mg/L
butan-1-ol	water treatment plant	/	mg/L
butan-1-ol	fresh water sediment	dry weight	mg/kg
butan-1-ol	marine water sediment	dry weight	mg/kg
butan-1-ol	soil	dry weight	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	No information.
Flammability	No information.
Lower and upper explosion limit	1.2 vol % (123-86-4 n-butyl acetate) 13 vol % (67-64-1 acetone)
Flash point	No information.
Auto-ignition temperature	333 °C (108-65-6 2-methoxy-1-methylethyl acetate)
Decomposition temperature	No information.
pH	No information.
Viscosity	No information.
Solubility	Water: insoluble
Partition coefficient	No information.
Vapour pressure	3500 hPa at 20 °C
Density and/or relative density	Density: 0.8 g/cm ³ at 20 °C
Relative vapour density	No information.
Particle characteristics	No information.

9.2 OTHER INFORMATION

Solids content	12.9 %
Weight organic solvents	86.5 %
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 temperatures 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
acetone	oral	LD ₅₀	rat	/	5800 mg/kg	/	/
acetone	dermal	LD ₅₀	rabbit	/	20000 mg/kg	/	/
n-butyl acetate	dermal	LD ₅₀	rabbit	/	5000 mg/kg	/	/
n-butyl acetate	inhalation	LC ₅₀	rat	4 h	9.6 - 29.2 mg/l	/	dust/aerosol
n-butyl acetate	oral	LD ₅₀	rat	/	4700 mg/kg	/	/
propane	inhalation	LD ₅₀	rat	4 h	> 20 mg/l	/	/
isobutane (containing <0,1% butadiene (203-450-8))	inhalation	LC ₅₀	rat	4 h	658 mg/l	/	/
2-methoxy-1- methylethyl acetate	oral	LD ₅₀	rat	/	8530 mg/kg	/	/
2-methoxy-1- methylethyl acetate	inhalation	LC ₅₀	rat	4 h	35.7 mg/l	/	vapour
2-methoxy-1- methylethyl acetate	dermal	LD ₅₀	rat	/	5000 mg/kg	/	/
butane (containing <0,1 % butadiene)	inhalation	LC ₅₀	rat	4 h	658 mg/l	/	/
titanium dioxide	oral	LD ₅₀	rat	/	10000 mg/kg	/	/
trizinc bis(orthophospha te)	oral	LD ₅₀	rat	/	> 5000 mg/kg	Wistar Wistar	/

trizinc bis(orthophosphate)	inhalation	LC ₅₀	rat	4 h	> 5.7 mg/l	/	/
cellulose nitrate	oral	LD ₅₀	rat	/	> 5000 mg/kg	/	/
butan-1-ol	oral	LD ₅₀	rat	/	790 mg/kg	/	/
butan-1-ol	dermal	LD ₅₀	rabbit	/	3400 mg/kg	/	/

Additional information

The product is not classified for acute toxicity.

(b) Skin corrosion/irritation

No information.

(c) Serious eye damage/irritation

For components

Name	Exposure route	Species	Time	result	Method	Remark
isobutane (containing <0,1% butadiene (203-450-8))	/	rabbit	/	Non-irritant.	/	/
2-methoxy-1-methylethyl acetate	/	/	/	May cause irritation.	/	/

Additional information

Causes serious eye irritation.

(d) Respiratory or skin sensitisation

No information.

Additional information

The product is not classified as sensitising.

(e) (Germ cell) mutagenicity

For components

Name	Type	Species	Time	result	Method	Remark
isobutane (containing <0,1% butadiene (203-450-8))	/	Bacteria	/	Negative.	OECD 471	Bacterial Reverse Mutation Test
butane (containing <0,1 % butadiene)	/	Bacteria	/	Negative.	OECD 471 (EU B. 12/13)	/

(f) Carcinogenicity

For components

Name	Exposure route	Type	Species	Time	value	result	Method	Remark
titanium dioxide	/	/	/	/	/	IARC 2B: Possibly carcinogenic to humans.	/	/

(g) Reproductive toxicity

No information.

Summary of evaluation of the CMR properties

Suspected of causing cancer.

(h) STOT-single exposure

For components

Name	Exposure route	Type	Species	Time	Exposure organ	value	result	Method	Remark
------	----------------	------	---------	------	----------------	-------	--------	--------	--------

butane (containing <0,1 % butadiene)	-	-	/	/	/	/	/	Symptoms: ataxia, breathing difficulties, drowsiness, unconscious ness, frostbite, disturbed heart rhythm, headaches, cramps, intoxication, dizziness, nausea and vomiting.	/	/
---	---	---	---	---	---	---	---	---	---	---

Additional information

May cause drowsiness or dizziness.

(i) STOT-repeated exposure

No information.

Additional information

Repeated exposure may cause skin dryness or cracking. STOT RE (repeated exposure): Not classified.

(j) Aspiration hazard

No information.

Additional information

Aspiration hazard: Not classified.

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
n-butyl acetate	LC ₅₀	18 mg/L	96 h	fish	/	/	/
n-butyl acetate	EC ₅₀	44 mg/L	48 h	crustacea	/	/	/
n-butyl acetate	EC ₅₀	675 mg/L	72 h	algae	/	/	/
2-methoxy-1-methylethyl acetate	LC ₅₀	100 mg/L	96 h	fish	<i>Oncorhynchus mykiss</i>	/	/
2-methoxy-1-methylethyl acetate	EC ₅₀	500 mg/L	48 h	crustacea	/	/	/

trizinc bis(orthophosphate)	LC ₅₀	0.78 mg/L	96 h	fish	<i>Pimephales promelas</i>	/	/
trizinc bis(orthophosphate)	EC ₅₀	0.86 mg/L	48 h	crustacea	<i>Daphnia magna</i>	/	/
cellulose nitrate	LC ₅₀	> 5000 mg/L	96 h	fish	<i>Brachydanio rerio</i>	/	/
butan-1-ol	LC ₅₀	1376 mg/L	96 h	fish	<i>Pimephales promelas</i>	OECD Guideline 203 (Fish, Acute Toxicity Test)	/
butan-1-ol	EC ₅₀	1328 mg/L	48 h	invertebrates	<i>Daphnia magna</i>	OECD 202	/
butan-1-ol	EC ₅₀	225 mg/L	96 h	Aquatic plants	<i>Selenastrum capricornutum</i>	/	/
butan-1-ol	EC ₁₀	2476 mg/L	17 h	bacteria	/	DIN 38412	/

Chronic (long-term) toxicity

For components

Name	Type	value	Exposure time	Species	organism	Method	Remark
butan-1-ol	NOEC	4.1 mg/l	21 days	aquatic invertebrate	<i>Daphnia magna</i>	OECD 211	/

12.2 Persistence and degradability

Abiotic degradation, physical- and photo-chemical elimination

No information.

Biodegradation

For components

Name	Type	Rate	Time	Evaluation	Method	Remark
trizinc bis(orthophosphate)	Water solubility	2.7 mg/L	/	/	/	/

12.3 Bioaccumulative potential

Partition coefficient

For components

Name	Media	value	Temperature °C	pH	Concentration	Method
butane (containing <0,1 % butadiene)	Octanol-water (log Pow)	2.98	/	/	/	/

Bioconcentration factor (BCF)

For components

Name	Species	organism	value	Duration	Evaluation	Method	Remark
2-methoxy-1-methylethyl acetate	organism	/	0.43	/	/	/	/

12.4 Mobility in soil

Known or predicted distribution to environmental compartments

No information.

Surface tension

No information.

Adsorption/Desorption

No information.

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

2-methoxy-1-methylethyl acetate

Water hazard class 1 (Self-assessment): slightly hazardous for water

butane (containing <0,1 % butadiene)

This substance is not PBT-/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			
NO	NO	NO	NO
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	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

Ingredients according to Regulation (EC) No 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

8.2 Exposure controls

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

H201 Explosive; mass explosion hazard.
H220 Extremely flammable gas.
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H280 Contains gas under pressure; may explode if heated.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
EUH066 Repeated exposure may cause skin dryness or cracking.