SAFETY DATA SHEET FOAMTACK PRO

The safety data sheet is in accordance with Commission Regulation (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

SECTION 1: Identification of the substance / mixture and of the company / undertaking

Date issued	02.05.2019
Revision date	10.04.2024

1.1. Product identifier

Product name	FOAMTACK PRO
Article no.	T670009

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

Use of the substance / mixture	Sealing compound.
Consumer use	Yes

1.3. Details of the supplier of the safety data sheet

Company name	Relekta AS		
Office address	Innspurten 1A		
Postal address	Postboks 6169 Etterstad		
Postcode	0663		
City	Oslo		
Country	Norway		
Telephone number	+47 22 66 04 00		
Fax	+47 22 66 04 01		
Email	post@relekta.no		
Website	www.relekta.no		
Enterprise No.	NO 831 881 372		

1.4. Emergency telephone number

Emergency telephone	Telephone number: +47 22 59 13 00	
	Description: For poisoning emergencies (UK)	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to	Aerosol 1; H222		
[CLP / GHS]	Aerosol 1; H229		
	Carc. 2; H351		
	Acute Tox. 4; H302		
	STOT RE 2; H373		
	Eye Irrit. 2; H319		
	STOT SE 3; H335		
	Skin Irrit. 2; H315		
	Resp. Sens. 1; H334		
	Skin Sens. 1; H317		
Substance / mixture hazardous properties	Extremely flammable aerosol. Pressurized container: May explode when heated. Suspected of causing cancer. Harmful if swallowed. May cause damage to organs through prolonged or repeated exposure. Causes serious eye irritation. May cause respiratory irritation. Causes skin irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.		

2.2. Label elements

Hazard pictograms (CLP)				
Composition on the label	4,4'-methylenediphenyl diisocyanate, isomers and homologues, Reaction products of phosphoryl trichloride and 2-methyloxirane, Glycerol, propoxylated			
Signal word	Danger			
Hazard statements	 H222 Extremely flammable aerosol. H229 Pressurised container: May burst if heated. H302 Harmful if swallowed. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation. H351 Suspected of causing cancer . H373 May cause damage to organs through prolonged or repeated exposure 			
Precautionary statements	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. P308+P313 IF exposed or concerned: Get medical advice / attention. P405 Store locked up. P410+P412 Protect from sunlight. Do no expose to temperatures exceeding 50 °C / 122°F. P501 Dispose of contents / container to i samsvar med lokale/regionale/ nasjonale/internasjonale forskrifter.
Supplemental label information	 EUH 204 Contains isocyanates. May produce an allergic reaction. Persons already sensitised to diisocyanates may develop allergic reactions when using this product. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used. As from 24 August 2023 adequate training is required before industrial or professional use.
Tactile warnings	Yes
Child-protection	Yes

2.3. Other hazards

PBT / vPvB	The chemical contains no PBT or vPvB substances.		
Hazard description, general	Aerosol cans may explode in a fire. Vapours may be ignited by a spark, a hot surface or an ember.		
Physicochemical effects	The vapours are heavier than air and will spread along the floor.		
Health effect	Inhalation of isocyanate vapors may cause shortness of breath, chest discomfort and reduced lung function. This chemical contains a substance which may penetrate the skin.		
Other hazards	The chemical does not contain any known or suspected endocrine disruptors.		

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents	Notes
4,4´-methylenediphenyl	CAS No.: 9016-87-9	Skin Sens. 1; H317	≥ 40 < 60 %	
diisocyanate, isomers and		Resp. Sens. 1; H334		
homologues		Skin Irrit. 2; H315		
		STOT SE 3; H335		
		Eye Irrit. 2; H319		
		STOT RE 2; H373		
		Acute tox. 4; H332		
		Carc. 2; H351		
Reaction products of	CAS No.: 1244733-77-4	Acute Tox. 4; H302	≥ 10 < 20 %	
phosphoryl trichloride and	EC No.: 807-935-0	Aquatic Chronic 3; H412		
2-methyloxirane	REACH Reg. No.:			

Glycerol, propoxylated

01-2119486772-26

EC No.: 500-044-5

CAS No.: 25791-96-2

Acute tox. 4; H302	≥ 10 < 20 %
Flam. Gas 1A; H220	≥ 5 < 10 %

Propellant mixture of:				
Dimethyl ether CAS N EC No. Index I REACH 01-21		o.: 115-10-6 : 204-065-8 No.: 603-019-00-8 I Reg. No.: 9472128-37	Flam. Gas 1A; H220 Press. Gas (Liq.) ; H280	≥ 5 < 10 %
Isobutane	CAS No.: 75-28-5 EC No.: 200-857-2 Index No.: 601-004-00-0 REACH Reg. No.: 01-2119485395-27		Flam. Gas 1A; H220 Press. Gas (Liq.) ; H280	≥ 5 < 10 %
Propane CAS No.: 74-98-6 EC No.: 200-827-9 Index No.: 601-003-00-5 REACH Reg. No.: 01-2119486944-21		Flam. Gas 1A; H220 Press. Gas (Liq.) ; H280	≥ 1 < 2,5 %	
Remarks, substance		CAS No 9016-87-9 has specific concentration limits: Eye Irrit. 2; H319: $C \ge 5 \%$, Skin Irrit. 2; H315: $C \ge 5 \%$, STOT SE 3; H335: $C \ge 5 \%$ og Resp Sens. 1; H334: $C \ge 0.1 \%$. CAS-nr.:75-28-5 contains < 0,1% 1,3-butadiene. This indicates that the ingredient is neither carcinogenic nor mutagenic. For ATE-value(-s), see section 11.		
Substance comments		See section 16 for explanation of hazard statements (H) listed above. For substances without REACH registration number, no information has been provided by the subcontractor or manufacturer.		

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Emergency telephone number: see section 1.4. In case of unconsciousness or severe accidents, call 112.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Consult a physician if symptoms should occur.
Skin contact	Remove contaminated clothing. Rinse immediately with plenty of water. Consult a doctor if symptoms should occur. Wash contaminated clothes before reuse.
Eye contact	Remove contact lenses and open eyes wide apart. Promptly rinse eyes with plenty of water (tempered at 20-30°C) for at least 15 minutes. By prolonged rinsing, use luke warm water to avoid damage to the eye. Contact physician if irritation persists.
Ingestion	Rinse your mouth thoroughly with water. Do NOT induce vomiting. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed

General symptoms and effects

Isocyanates have a relatively high odour threshold and the odour will only be

	noticed at relatively high concentrations. Harmful amounts may therefore be inhaled without prior warning.
Acute symptoms and effects	Inhalation: May cause respiratory irritation. The chemical irritates the airways and can cause itching, burning and cough. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Symptoms of hypersensitivity such as asthma, rhinitis (hay fever) or alveolitis can occur. Inhalation of isocyanate vapors can cause shortness of breath, chest discomfort and reduced lung function. Skin contact: The chemical irritates the skin and can cause itching, burning and redness. May cause sensitisation by skin contact. Allergic skin reactions: symptoms may include redness, swelling, blistering and itching. Eye contact: Causes serious eye irritation. Symptoms such as strong burning, watery eyes, redness and blurred vision may occur.
	Ingestion: Harmful if swallowed. Burning sensation in the mouth, throat and stomach. Abdominal pain. May cause nausea, vomiting and diarrhea.
Delayed symptoms and effects	Suspected of being able to cause cancer. May cause damage to organs through prolonged or repeated exposure.

4.3. Indication of any immediate medical attention and special treatment needed

Other information	Treat symptomatically.
	No specific information from the manufacturer.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Powder.
Improper extinguishing media	Carbon dioxide (CO2) Water. Foam.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	Extremely flammable aerosol. Pressurized container: May explode when heated. Can form explosive gas-air mixtures. Vapours are heavier than air and may spread near ground to sources of ignition. Aerosol cans may explode in a fire.	
Hazardous combustion products	May develop highly toxic or corrosive fumes if heated. May include, but is not limited to: Carbon dioxide (CO2). Carbon monoxide (CO). Oxides of phosphorous (POx). Oxides of nitrogen (NOx) Hydrogen chloride (HCI). Hydrogen cyanide (HCN). Isocyanates.	

5.3. Advice for firefighters

Personal protective equipment	Use compressed air equipment when the chemical is involved in fire. In case of evacuation, an approved protection mask should be used. See also section 8.
Other information	Extinguishing water must not be discharged into drains. Containers close to fire should be removed immediately or cooled with water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	Keep away from heat / sparks / open flames / hot surfaces. — No smoking.
Personal protection measures	Provide adequate ventilation. Avoid inhalation of vapours and aerosols and contact with skin and eyes. Use protective equipment as referred to in section 8.

6.2. Environmental precautions

Environmental precautionary	Do not allow to enter into sewer, water system or soil.
measures	

6.3. Methods and material for containment and cleaning up

Clean up	Aerosol cans are collected mechanically. Content of the spray can: Absorb in vermiculite, dry sand or earth and place into containers. Collect in a suitable container and dispose as hazardous waste according to section 13. Wash the contaminated surface with acetone.
Other information	Vapours may form explosive mixtures with air on the ground.

6.4. Reference to other sections

Other	instru	ctions

See also sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective safety measures

Safety measures to prevent fire	Do not use near naked flames or glowing materials. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Do not spray on a naked flame or red-hot material. Use explosion-proof electrical / ventilating / lighting / / equipment. Ground / bond container and receiving equipment. Use only non-sparking tools. Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C. Do not puncture or burn, even when empty. Do not use near open flames or incandescent materials.
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7.2. Conditions for safe storage, including any incompatibilities

Storage	Store in tightly closed original container in a dry, cool and well-ventilated place.
Conditions to avoid	Keep away from heat, sparks and open flame. Protect from sunlight.

Conditions for safe storage

Advice on storage compatability	Keep away from: Strong acids. Food and feed.
Storage temperature	Value: < 50 °C
Storage stability	Maximum storage time: 1 year.

7.3. Specific end use(s)

Specific use(s)

See section 1.2.

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Ident	ification	Exposure limits	TWA Year
Dimethyl ether	CAS	No.: 115-10-6	Limit value (8 h) : 200 ppm Limit value (8 h) : 384 mg/ m ³ Exposure limit letter Letter code: E Comments: Norwegian OEL	
Propane	CAS	No.: 74-98-6	Limit value (8 h) : 500 ppm Limit value (8 h) : 900 mg/ m ³	
Diisocyanat			Limit value (8 h) : 0,005 ppm Exposure limit letter Letter code: A, 4	
Control parameters comments	3	Explanation of the nota A = Chemicals to be tree hypersensitivity in the e allergic reactions in cor E = The EU has an indic 4) The short-term value References (laws/regul Norwegian regulation of tiltaks- og grenseverdie	tions: eated as provoking allergic rea eyes or respiratory organs, or t ntact with skin. eative limit value and/or remar e for diisocyanates is 0.01 ppn ations): on exposure limits: FOR-2011-1 or (sist endret gjennom FOR-20	ctions or other o be treated as provoking k for the substance. n 12-06-1358 Forskrift om 023-12-18-2278).

DNEL / PNEC

DNEL	Group: Professional
	Route of exposure: Long-term inhalation (systemic)
	Value: 8,2 mg/m ³

	Comments: Applies to CAS-nr: 1244733-77-4.
	Group: Professional Route of exposure: Acute inhalation (systemic) Value: 22,6 mg/m ³ Comments: Applies to CAS-nr: 1244733-77-4.
	Group: Professional Route of exposure: Long-term dermal (systemic) Value: 2,91 mg/kg bw/day Comments: Applies to CAS-nr: 1244733-77-4.
	Group: Consumer Route of exposure: Long-term inhalation (systemic) Value: 1,45 mg/m³ Comments: Applies to CAS-nr: 1244733-77-4.
	Group: Consumer Route of exposure: Acute inhalation (systemic) Value: 5,6 mg/m ³ Comments: Applies to CAS-nr: 1244733-77-4.
	Group: Consumer Route of exposure: Long-term dermal (systemic) Value: 1,04 mg/kg bw/day Comments: Applies to CAS-nr: 1244733-77-4.
	Group: Consumer Route of exposure: Long-term oral (systemic) Value: 0,52 mg/kg bw/day Comments: Applies to CAS-nr: 1244733-77-4.
	Group: Consumer Route of exposure: Acute oral (systemic) Value: 2 mg/kg bw/day Comments: Applies to CAS-nr: 1244733-77-4.
PNEC	Route of exposure: Freshwater Value: 0,32 mg/l Comments: Applies to CAS-nr: 1244733-77-4.
	Route of exposure: Water Value: 0,51 mg/l Comments: Applies to CAS-nr: 1244733-77-4.
	Route of exposure: Saltwater Value: 0,032 mg/l Comments: Applies to CAS-nr: 1244733-77-4.
	Route of exposure: Sewage treatment plant STP Value: 19,1 mg/l Comments: Applies to CAS-nr: 1244733-77-4.
	Route of exposure: Freshwater sediments Value: 11,5 mg/kg dw Comments: Applies to CAS-nr: 1244733-77-4.

Route of exposure: Saltwater sediments Value: 1,15 mg/kg dw Comments: Applies to CAS-nr: 1244733-77-4.
Route of exposure: Soil Value: 0,34 mg/kg dw Comments: Applies to CAS-nr: 1244733-77-4.
Route of exposure: Food products Value: 11,6 mg/kg Comments: Applies to CAS-nr: 1244733-77-4.

8.2. Exposure controls

Precautionary measures to prevent exposure

Technical measures to prevent	Provide adequate ventilation. The personal protective equipment must be
exposure	CE-marked and the latest version of the standards shall be used. The protective
	equipment and the specifical standards recommended below are only
	suggestions, and should be selected on advice from the supplier of such
	equipment.
	A risk assessment of the work place/work activities (the actual risk) may lead to
	other control measures. The protection equipment's suitability and durability will depend on application.

Eye / face protection

Eye protection equipment	Description: Wear tight-fitting goggles or face shield. Reference to relevant standard: EN ISO 16321-1:2022 (Eye and face protection for occupational use - Part 1: General requirements).
Additional eye protection measures	Eye wash facilities shall be available at the work place. Either a fixed eye wash facility connected to the drinking water (preferably warm water) or a portable disposable unit.

Hand protection

Suitable materials	Polyvinyl chloride (PVC).
Breakthrough time	Value: 480 minute(s) Comments: Standard working day. Ref: Glove materials guide.
Thickness of glove material	Value: ≥ 0,35 mm Comments: Ref: Glove materials guide.
Hand protection equipment	 Description: The recommended material of gloves is recommended after a study of the single components in the chemical. Use chemical resistant gloves. The gloves abilities may vary among the different glove manufacturers. Glove thickness must be chosen in consultation with the glove supplier, who can inform about the breakthrough time for the glove. Reference to relevant standard: EN ISO 374 (Protective gloves against chemicals and micro-organisms). EN ISO 21420:2020 (Protective gloves - General requirements and test methods).

Additional hand protection measures	Replace gloves if signs of wear and tear. Gloves must only be worn on clean, dry hands.
Skin protection	
Recommended protective clothing	Description: Wear appropriate protective clothing to protect against possible skin contact. Suit with hood giving complete protection to head, face and neck. Reference to relevant standard: EN 14605 (Protective clothing against liquid chemicals. performance requirements for clothing with liquid-tight (Type 3) or spray-tight (Type 4) connections, including items providing protection to parts of the body only (Types PB [3] and PB [4])). NS-EN 13034 Vernetøy mot flytende kjemikalier. Ytelseskrav til vernetøy som gir begrenset beskyttelse mot flytende kjemikalier (Utstyr type 6 og type PB(6))
Additional skin protection measures	Emergency shower should be available at the workplace.

Respiratory protection

Recommended respiratory protection	Description: Use combination filter A/P2 by aerosol formation. Air-supplied mask shall be used when spraying with chemicals containing isocyanates. Reference to relevant standard: EN 14387 (Respiratory protective devices. Gas filter(s) and combined filter(s). Requirements, testing, marking). EN 143 (Respiratory protective devices - Particle filters - Requirements, testing, marking).
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Appropriate environmental exposure control

Environmental exposure controls	Do not allow to enter into sewer, water system or soil
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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Foam Aerosol.
Colour	Orange.
Odour	Not determined.
pН	Comments: Not relevant. Insoluble in water.
Freezing point	Comments: Not specified by the manufacturer.
Boiling point / boiling range	Value: -12 °C Comments: (propellant)
Flash point	Comments: Not relevant.
Flammability	Extremely flammable aerosol.
Explosion limit	Comments: Not determined.
Vapour pressure	Value: < 3000 hPa Temperature: 50 °C
Vapour density	Value: > 1
Particle characteristics	Comments: Not relevant.
Relative density	Value: 1,02

	Comments: Liquid Temperature: 20 °C
Density	Value: 1019 kg/m³ Comments: Liquid Temperature: 20 °C
Solubility	Medium: Water Comments: Insoluble.
Partition coefficient: n-octanol/ water	Comments: Not relevant for a mixture.
Auto-ignition temperature	Comments: Not specified by the manufacturer.
Decomposition temperature	Comments: Not specified by the manufacturer.
Viscosity	Comments: Not relevant.

9.2. Other information

Physical hazards

Content of VOC	Value: 11 - 22,5 %
	Value: 112 - 229 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	May be ignited by heat, sparks or flames. Vapors may form explosive mixtures with air.

10.2. Chemical stability

Stability	The chemical is stable under normal conditions of storage and use.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	May arise in contact with incompatible materials (see section 10.5).
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10.4. Conditions to avoid

Conditions to avoid	Protect from direct sunlight. Do not pressurise, cut, weld, braze, solder, drill, grind
	or expose containers to heat or sources of ignition. Do not expose to
	temperatures above 50 °C.

10.5. Incompatible materials

Materials to avoid

Strong acids.

10.6. Hazardous decomposition products

Hazardous decomposition	None under normal conditions. See also section 5.2.
products	

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity	Effect tested: LD50 Route of exposure: Oral Method: EU Metode B.1 tris Value: 632 mg/kg Species: Rat Comments: Applies to CAS-nr: 1244733-77-4.
	Effect tested: LD50 Route of exposure: Dermal Method: OECD 402 Duration: 24 hour(s) Value: > 2000 mg/kg Species: Rat Comments: Applies to CAS-nr: 1244733-77-4.
	Effect tested: LC50 Route of exposure: Inhalation. (mist) Method: OECD 403 Duration: 4 hour(s) Value: > 7 mg/l Species: Rat Comments: Applies to CAS-nr: 1244733-77-4.
	Effect tested: LD50 Route of exposure: Oral Value: > 2000 mg/kg Comments: Applies to CAS-nr: 9016-87-9.
	Effect tested: LD50 Route of exposure: Dermal Value: > 2000 mg/kg Comments: Applies to CAS-nr: 9016-87-9.
	Effect tested: LC50 Route of exposure: Inhalation (vapour) Duration: 4 hour(s) Value: 11 mg/l Comments: Applies to CAS-nr: 9016-87-9.
Other toxicological data	Relevant data are missing. Value for: CAS-nr: 25791-96-2.

Other information regarding health hazards

Assessment of acute toxicity, classification	Harmful if swallowed.
Assessment of skin corrosion / irritation, classification	Irritating to skin.
Assessment of eye damage or irritation, classification	Causes serious eye irritation.
Assessment of respiratory sensitisation, classification	May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Assessment of skin sensitisation, classification	May cause an allergic skin reaction.
General	Corrosive/Irritating 4,4'-methylene diphenyl diisocyanate - CAS no: 9016-87-9 Eye, Irritant; category 2, Literature study, Skin, Irritant; category 2, Literature study, Inhalation, Irritant; STOT SE cat.3, Literature study,
	Reaction products of phosphoryl trichloride and 2-methyloxirane - CAS no: 1244733-77-4 Eye, Non-irritant, OECD 405, 24 h, 24; 48; 72 hours, Rabbit, Experimental value, Single treatment with rinsing Skin, Non-irritant, OECD 404, 4 h, 24; 48; 72 hours, rabbit, experimental value
	Sensitizing for skin and respiratory tract 4,4'-methylene diphenyl diisocyanate - CAS no: 9016-87-9 Skin, Sensitizing; category 1, Literature study, Inhalation, Sensitizing; category 1, Literature study,
	Reaction products of phosphoryl trichloride and 2-methyloxirane - CAS no: 1244733-77-4 Skin (on ears), Not sensitizing, OECD 429, Mouse (female), Experimental value,
	Specific organ toxicity 4,4'-methylene diphenyl diisocyanate - CAS no: 9016-87-9 Inhalation, STOT RE cat.2, Literature study,
	Reaction products of phosphoryl trichloride and 2-methyloxirane - CAS no: 1244733-77-4 Oral (diet), NOAEL, Subchronic toxicity test, 171 mg/kg body weight/day, No effect, 13 weeks (daily), Rat (female), Experimental value, Oral (diet), Dose level, Subchronic toxicity test, 52 mg/kg body weight/day, Liver (enlargement/affect of liver), 13 weeks (daily), Rat (male), Experimental value,
	Mutagenic properties (in vitro) 4,4'-methylene diphenyl diisocyanate - CAS no: 9016-87-9 Negative without metabolic activation, Positive with metabolic activation, OECD 476, Mouse (lymphoma L5178Y cells), Experimental value, Negative with metabolic activation, negative without metabolic activation, OECD 471, Bacteria (S. typhimurium and E. coli), Experimental value,
	Mutagenic properties (in vivo) Reaction products of phosphoryl trichloride and 2-methyloxirane - CAS no: 1244733-77-4 Negative (Oral (gastric tube)), Rat (male), No effect, Experimental value, Single treatment
	Carcinogen 4,4'-methylene diphenyl diisocyanate - CAS no: 9016-87-9 Inhalation, category 2, Literature study, Dermal, category 2, Literature study, Oral, category 2, Literature study,

	Reproductive toxicity Reaction products of phosphoryl trichloride and 2-methyloxirane - CAS no: 1244733-77-4 Developmental toxicity (Oral (gastric tube)), NOAEL, OECD 414, 500 mg/kg bw/ day, 23 days (gestation, daily), Rabbit, Fetus (no effect), Experimental value, Maternal toxicity (Oral (gastric tube)), NOAEL, OECD 414, 500 mg/kg bw/day, 23 days (gestation, daily), Rabbit, No effect, Experimental value, Effects on fertility (Oral (dietary)), LOAEL, OECD 416, 99 mg/kg bw/day, Rat (male/female), Reproductive performance, Experimental value.
Assessment of germ cell mutagenicity, classification	Based on available data, the classification criteria are not met.
Assessment of carcinogenicity, classification	Suspected of causing cancer.
Assessment of reproductive toxicity, classification	Based on available data, the classification criteria are not met.
Assessment of specific target organ toxicity - single exposure, classification	May cause respiratory irritation.
Assessment of specific target organ toxicity - repeated exposure, classification	May cause damage to organs through prolonged or repeated exposure.
Assessment of aspiration hazard, classification	Based on available data, the classification criteria are not met.

Symptoms of exposure

In case of ingestion	Harmful if swallowed. Burning sensation in the mouth, throat and stomach. May cause nausea, vomiting and diarrhea.
In case of skin contact	The chemical irritates the skin and can cause itching, burning and redness. May cause sensitisation by skin contact. Allergic skin reactions: symptoms may include redness, swelling, blistering and itching.
In case of inhalation	May cause respiratory irritation. The chemical irritates the airways and can cause itching, burning and cough. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Symptoms of hypersensitivity such as asthma, rhinitis (hay fever) or alveolitis can occur. Inhalation of isocyanate vapors can cause shortness of breath, chest discomfort and reduced lung function.
In case of eye contact	Causes serious eye irritation. Symptoms such as strong burning, watery eyes, redness and blurred vision may occur.

11.2 Other information

Endocrine disruption

The chemical does not contain any known or suspected endocrine disruptors.

SECTION 12: Ecological information

12.1. Toxicity

Aquatic toxicity, fish

Toxicity type: Acute Value: 56 mg/l Effect dose concentration: LC50

	Test duration: 96 hour(s) Species: Danio rerio Method: Static system Fresh water Experimental value, nominal concentration Comments: Applies to CAS-nr. 1244733-77-4.
Aquatic toxicity, algae	Toxicity type: Acute Value: 82 mg/l Effect dose concentration: ERC50 Test duration: 72 hour(s) Species: Pseudokirchneriella subcapitata Method: OECD 201 Static test. Fresh water Experimental value, nominal concentration Comments: Applies to CAS-nr. 1244733-77-4. Toxicity type: Chronic Value: 13 mg/l Effect dose concentration: NOEC Test duration: 72 hour(s) Species: Pseudokirchneriella subcapitata Method: OECD 201 Static test. Fresh water Experimental value, growth rate.
Aquatic toxicity, crustacean	Toxicity type: Acute Value: 131 mg/l Effect dose concentration: LC50 Test duration: 48 hour(s) Species: Daphnia magna Method: Fresh water
	Static system Comments: Applies to CAS-nr. 1244733-77-4. Toxicity type: Chronic Value: 32 mg/l Effect dose concentration: NOEC Test duration: 21 day(s) Species: Daphnia magna Method: OECD 202 Semi-static Fresh water Experimental value, GLP Comments: Applies to CAS-nr. 1244733-77-4.
Ecotoxicity	The chemical is not classified as harmful to the environment.

12.2. Persistence and degradability

Persistence and degradability	Contains substances that are not considered readily biodegradable.
description/evaluation	

Biodegradability	Value: 14 % Method: EU Method C4-D Experimental value Comments: Applies to CAS-nr. 1244733-77-4. Test period: 28 day(s)
	Value: 38 - 41 % Method: OECD 301 B Experimental value Comments: Applies to CAS-nr: 1244733-77-4. Test period: 28 day(s)

12.3. Bioaccumulative potential

Bioconcentration factor (BCF)	Value: 0,8 - 14 Species: Cyprinus carpio Method: OECD 305 Duration: 6 weeks Comments: Applies to CAS-pr. 1244733-77-4
	Method: BCFBAF v3.01 Comments: Value: 268,1 I/kg; Fresh weight. Applies to CAS-nr: 9016-87-9.
Bioaccumulation, evaluation	Log Kow: 10,46. Method: KOWWIN, assumed value. Applies to CAS-nr: 9016-87-9. Log Kow: 2,7. Method: EU Method A.8, Temperature: 30°C, Experimental value. Applies to CAS-nr: 1244733-77-4.
Bioaccumulation, comments	The chemical does not contain any substances that are considered bioaccumulative.

12.4. Mobility in soil

Insoluble in water
Contains components that adsorb into soil
contains components that adoord into soil.
Log Koc: 9,078 - 10,597. Method: SRC PCKOCWIN v2.0. Applies to CAS-nr:
9016-87-9.
Log Koc: 3,2. Method: SRC PCKOCWIN v2.0. Applies to CAS-nr: 1244733-77-4.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB	The chemical contains no PBT or vPvB substances.
assessment	

12.6. Endocrine disrupting properties

Endocrine disrupting properties	The chemical does not contain any known or suspected endocrine disruptors.

12.7. Other adverse effects

Ozone depletion potential	Comments: The chemical contains no substances classified as hazardous to the ozone layer.
Additional ecological information	The chemical contains substances known to contribute to the greenhouse effect. Danger of drinking water pollution (ground water). Do not allow to enter into sewer, water system or soil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate methods of disposal for the chemical	Disposed of as hazardous waste by approved contractor. The waste code (EWC-Code) is intented as a guide. The code must be chosen by the user, if the use differs from the one mentioned below.
EWC waste code	EWC waste code: 080409 waste adhesives and sealants containing organic solvents or other dangerous substances Classified as hazardous waste: Yes
	EWC waste code: 080501 waste isocyanates Classified as hazardous waste: Yes
	EWC waste code: 160504 gases in pressure containers (including halons) containing dangerous substances Classified as hazardous waste: Yes
EWL packing	EWC waste code: 150110 packaging containing residues of or contaminated by dangerous substances Classified as hazardous waste: Yes
NORSAS	7055 Aerosol cans.
Other information	Do not empty into drains.

SECTION 14: Transport information

Yes

Dangerous goods

14.1. UN number

ADR/RID/ADN	1950
IMDG	1950
ICAO/IATA	1950

14.2. UN proper shipping name

Proper shipping name English ADR/RID/ADN	AEROSOLS
ADR/RID/ADN	AEROSOLS
IMDG	AEROSOLS
ICAO/IATA	AEROSOLS, FLAMMABLE

14.3. Transport hazard class(es)

ADR/RID/ADN	2.1
Classificaton code ADR/RID/ADN	5F
IMDG	2.1
ICAO/IATA	2.1

14.4. Packing group

55	
Comments	Not relevant.
14.5. Environmental hazard	S

IMDG Marine pollutant No

14.6. Special precautions for user

Special safety precautions for user	Combination packaging: no more than 1 liter per inner packaging for liquids. A
	package must not weigh more than 30 kg (gross mass).

14.7. Maritime transport in bulk according to IMO instruments

Transport in bulk (yes/no)	Nei
Product name	AEROSOLS, FLAMMABLE

Additional information

Hazard label ADR/RID/ADN	2.1
Hazard label IMDG	2.1
Hazard label ICAO/IATA	2.1

ADR/RID Other information

Tunnel restriction code	D
Limited quantity	1L
Transport category	2

IMDG Other information

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EmS F-D, S-U
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SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture

Restriction of chemicals according to Annex XVII (REACH)	Contains substances in section 3 which are covered by points 56 and 74 of REACH Annex XVII. Applies to CAS-nr: 9016-87-9.
voc	VOC percent by weight: 11 - 22,5 VOC value: 112 - 229 g/l
References (laws/regulations)	Regulation (EC) No 1907/2006 on the registration, evaluation, authorization and restriction of chemicals (REACH Regulation), with later amendments. Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP-regulation) with later amendments. Norwegian regulation FOR-1996-03-01 no. 229 with later amendments: Forskrift om aerosolbeholdere. Norwegian regulation on waste, 01.06.2004 no. 930, with later amendments. Norwegian regulation on dangerous goods: FOR 2009-04-01 nr 384: Forskrift om

landtransport av farlig gods med senere endringer, Direktoratet for samfunnssikkerhet og beredskap.

15.2. Chemical safety assessment

Chemical safety assessment No performed

SECTION 16: Other information	
Supplier's notes	The information contained in this SDS must be made available to all those who handle the product.
List of relevant H-phrases (Section 2 and 3)	 H220 Extremely flammable gas. H222 Extremely flammable aerosol. H229 Pressurised container: May burst if heated. H280 Contains gas under pressure; may explode if heated. H302 Harmful if swallowed. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H332 Harmful if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H351 Suspected of causing cancer H351 Suspected of causing cancer . H373 May cause damage to organs through prolonged or repeated exposure H412 Harmful to aquatic life with long lasting effects.
CLP classification, comments	Aerosol 1; H222, H229; test Other hazard classes: Calculation method.
Key literature references and sources for data	Suppliers Safety data sheet dated: 27.01.2024.
Abbreviations and acronyms used	ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road BCF: Bio Concentration Factor DNEL: Derived No Effect Level EWC: European Waste Code (a code from the EU's common classification system for waste) EC50: The effective concentration of substance that causes 50% of the maximum response ErC50: ErC50 means EC50 in terms og reduction of growth rate, (ErC50 = EC50(growth rate)) IATA: The International Air Transport Association IMDG: The International Maritime Dangerous Goods Code ICAO: The International Civil Aviation Organisation IMO: International Maritime Organization LC50: Median concentration lethal to 50% of a test population. LD50: Lethal dose, is the amount of a substance given to a group of test animals, which causes the death of 50%. Log Kow: Partition coefficient: n-octanol / water NDEC: No observed offect concentration

	OECD: Organisation for Economic Cooperation and Development. PBT: Persistent, Bioaccumulative and Toxic PNEC: Predicted No Effect Concentration RID: The Regulations concerning the International Carriage of Dangerous Goods by Rail vPvB: very Persistent and very Bioaccumulative
Information added, deleted or revised	Sections being revised since previous version: 1-16
Checking quality of information	This SDS is quality controlled by Kiwa Kompetanse AS in Norway, certified according to the Quality Management System requirements specified in ISO 9001:2015.
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