

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form : Mixture
Trade name : Soudafoam FR
Reference number : 51384gb-gr-nl
Vaporizer : Aerosol

1.2. Relevant identified uses of the substance or mixture and uses advised against**1.2.1. Relevant identified uses**

Intended for general public
Main use category : Consumer use, Professional use
Use of the substance/mixture : Polyurethane

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Soudal N.V.
Everdongenlaan 18-20
2300 Turnhout - Belgium
T +32 14 42 42 31 - F +32 14 42 65 14
sds@soudal.com - www.Soudal.com

1.4. Emergency telephone number

Emergency number : +32 14 58 45 45 (BIG)
24h/24h

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Aerosol, Category 1	H222;H229
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Respiratory sensitisation, Category 1	H334
Skin sensitisation, Category 1	H317
Carcinogenicity, Category 2	H351
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H335
Specific target organ toxicity — Repeated exposure, Category 2	H373

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Pressurised container: May burst if heated. Extremely flammable aerosol. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure. May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

2.2. Label elements**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

Hazard pictograms (CLP) :



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	GHS02	GHS07	GHS08
Signal word (CLP)	: Danger		
Hazardous ingredients	: polymethylene polyphenyl isocyanate		
Hazard statements (CLP)	: H222 - Extremely flammable aerosol. H229 - Pressurised container: May burst if heated. 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 (CLP)	: 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. P405 - Store locked up. P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.		
Extra phrases	: 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.		

2.3. Other hazards

The product does not meet the PBT and vPvB classification criteria

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
polymethylene polyphenyl isocyanate substance with national workplace exposure limit(s) (GB)	(CAS-No.) 9016-87-9	≥ 25 – < 50	Carc. 2, H351 Resp. Sens. 1, H334 Skin Sens. 1, H317 Acute Tox. 4 (Inhalation), H332 STOT RE 2, H373 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
reaction products of phosphoryl trichloride and 2-methyloxirane	(CAS-No.) 1244733-77-4 (EC-No.) 807-935-0 (REACH-no) 01-2119486772-26	≥ 10 – < 25	Acute Tox. 4 (Oral), H302
1,1-difluoroethane (Propellant gas (Aerosol))	(CAS-No.) 75-37-6 (EC-No.) 200-866-1 (REACH-no) 01-2119474440-43	≥ 5 – < 10	Flam. Gas 1A, H220 Press. Gas (Liq.), H280

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isobutane (Propellant gas (Aerosol))	(CAS-No.) 75-28-5 (EC-No.) 200-857-2 (EC Index-No.) 601-004-00-0 (REACH-no) 01-2119485395-27	≥ 1 – < 5	Flam. Gas 1A, H220 Press. Gas
dimethyl ether (Propellant gas (Aerosol)) substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit	(CAS-No.) 115-10-6 (EC-No.) 204-065-8 (EC Index-No.) 603-019-00-8 (REACH-no) 01-2119472128-37	≥ 1 – < 5	Flam. Gas 1A, H220 Press. Gas
2,2-bis(bromomethyl)-1,3-propanediol	(CAS-No.) 3296-90-0 (EC-No.) 221-967-7 (EC Index-No.) 603-240-00-X	≥ 1 – < 5	Carc. 1B, H350 Muta. 1B, H340
triethyl phosphate	(CAS-No.) 78-40-0 (EC-No.) 201-114-5 (REACH-no) 01-2119492852-28	≥ 1 – < 5	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319
propane (Propellant gas (Aerosol))	(CAS-No.) 74-98-6 (EC-No.) 200-827-9 (EC Index-No.) 601-003-00-5	≥ 0,1 – < 1	Flam. Gas 1A, H220 Press. Gas (Liq.), H280

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after inhalation	: May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.

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	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Extremely flammable aerosol.
Explosion hazard	: Pressurised container: May burst if heated.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

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5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe vapours, spray, mist. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Leave the product to solidify. Mechanically recover the product. Carefully collect the spill/leftovers. Take collected spill to manufacturer/competent authority. Notify authorities if product enters sewers or public waters. Wash clothing and equipment after handling.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe vapours, spray, mist, gas. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Incompatible products : Heat sources. Ignition sources. Strong bases. Strong acids.

Maximum storage period : 1 year

Packaging materials : Aerosol.

7.3. Specific end use(s)

No additional information available

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

dimethyl ether (115-10-6)

EU - Indicative Occupational Exposure Limit (IOEL)

Local name	Dimethylether
IOEL TWA	1920 mg/m ³
IOEL TWA [ppm]	1000 ppm
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC

United Kingdom - Occupational Exposure Limits

Local name	Dimethyl ether
WEL TWA (OEL TWA) [1]	766 mg/m ³
WEL TWA (OEL TWA) [2]	400 ppm
WEL STEL (OEL STEL)	958 mg/m ³
WEL STEL (OEL STEL) [ppm]	500 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

polymethylene polyphenyl isocyanate (9016-87-9)

United Kingdom - Occupational Exposure Limits

WEL TWA (OEL TWA) [1]	0,02 mg/m ³
WEL STEL (OEL STEL)	0,07 mg/m ³

reaction products of phosphoryl trichloride and 2-methyloxirane (1244733-77-4)

DNEL/DMEL (Workers)

Acute - systemic effects, inhalation	22,6 mg/m ³
Long-term - systemic effects, dermal	2,91 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	8,2 mg/m ³

DNEL/DMEL (General population)

Acute - systemic effects, inhalation	5,6 mg/m ³
Acute - systemic effects, oral	2 mg/kg bodyweight
Long-term - systemic effects, oral	0,52 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	1,45 mg/m ³
Long-term - systemic effects, dermal	1,04 mg/kg bodyweight/day

PNEC (Water)

PNEC aqua (freshwater)	0,32 mg/l
PNEC aqua (marine water)	0,032 mg/l
PNEC aqua (intermittent, freshwater)	0,51 mg/l

PNEC (Sediment)

PNEC sediment (freshwater)	11,5 mg/kg dwt
PNEC sediment (marine water)	1,15 mg/kg dwt

PNEC (Soil)

PNEC soil	0,34 mg/kg dwt
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PNEC (Oral)	
PNEC oral (secondary poisoning)	11,6 mg/kg food
PNEC (STP)	
PNEC sewage treatment plant	19,1 mg/l
triethyl phosphate (78-40-0)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	26,8 mg/kg bodyweight/day
Acute - systemic effects, inhalation	94,5 mg/m ³
Long-term - systemic effects, dermal	3,35 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	11,81 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	13,36 mg/kg bodyweight/day
Acute - systemic effects, inhalation	23,28 mg/m ³
Acute - systemic effects, oral	13,36 mg/kg bodyweight/day
Long-term - systemic effects, oral	1,67 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	2,91 mg/m ³
Long-term - systemic effects, dermal	1,67 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0,632 mg/l
PNEC (STP)	
PNEC sewage treatment plant	298,5 mg/l

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



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Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Aerosol.
Colour	: Variable.
Odour	: characteristic.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Extremely flammable aerosol.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 1,09
Density	: 1090 kg/m ³
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Pressurised container: May burst if heated.
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

VOC content : 18,93 % (206.34 g/l)

SECTION 10: Stability and reactivity

10.1. Reactivity

Extremely flammable aerosol. Pressurised container: May burst if heated.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

dimethyl ether (115-10-6)	
LC50 Inhalation - Rat [ppm]	164000 ppm (4 h, Rat, Male, Experimental value, Inhalation (gases), 14 day(s))

1,1-difluoroethane (75-37-6)	
LC50 Inhalation - Rat [ppm]	> 437500 ppm (4 h, Rat, Male, Experimental value, Inhalation (gases), 14 day(s))

propane (74-98-6)	
LC50 Inhalation - Rat [ppm]	> 800000 ppm (15 minutes, Rat, Male / female, Experimental value, Inhalation (gases))

isobutane (75-28-5)	
LC50 Inhalation - Rat [ppm]	> 800000 ppm (15 minutes, Rat, Male / female, Experimental value, Inhalation (gases))

polymethylene polyphenyl isocyanate (9016-87-9)	
LD50 oral rat	> 10000 mg/kg (Rat, Literature study, Oral)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Literature study, Dermal)

reaction products of phosphoryl trichloride and 2-methyloxirane (1244733-77-4)	
LD50 oral rat	632 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 Inhalation - Rat	> 7 mg/l/4h

triethyl phosphate (78-40-0)	
LC50 Inhalation - Rat	> 8,817 mg/l air (Animal: rat, Guideline: OECD 403 (Acute Inhalation Toxicity))

2,2-bis(bromomethyl)-1,3-propanediol (3296-90-0)	
LD50 oral rat	> 2000 mg/kg (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 5000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitisation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Suspected of causing cancer.

polymethylene polyphenyl isocyanate (9016-87-9)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory irritation.

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STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

triethyl phosphate (78-40-0)

NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight (Animal: rat, EU Method B.7 (Repeated Dose (28 Days) Toxicity (Oral)))
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Aspiration hazard : Not classified

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Vaporizer	Aerosol
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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

Not rapidly degradable

dimethyl ether (115-10-6)

LC50 - Fish [1]	> 4100 mg/l (NEN 6504: Water - Determination of toxicity with <i>Poecilia reticulata</i> , 96 h, <i>Poecilia reticulata</i> , Semi-static system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	> 4400 mg/l (NEN 6501: Water - Determination of toxicity with <i>Daphnia magna</i> , 48 h, <i>Daphnia magna</i> , Static system, Fresh water, Experimental value, Lethal)
EC50 96h - Algae [1]	154,9 mg/l (ECOSAR v1.00, Algae, QSAR)

1,1-difluoroethane (75-37-6)

LC50 - Fish [1]	295,783 mg/l (ECOSAR v1.00, 96 h, Pisces, QSAR, Estimated value)
EC50 - Crustacea [1]	146,695 mg/l (ECOSAR v1.00, 48 h, <i>Daphnia</i> sp., QSAR, Estimated value)
EC50 96h - Algae [1]	47,755 mg/l (ECOSAR v1.00, Algae, QSAR, Estimated value)

propane (74-98-6)

LC50 - Fish [1]	49,9 mg/l (96 h, Pisces, Fresh water, QSAR, Estimated value)
EC50 96h - Algae [1]	11,89 mg/l (ECOSAR v1.00, Algae, Fresh water, QSAR)

isobutane (75-28-5)

LC50 - Fish [1]	27,98 mg/l (ECOSAR v1.00, 96 h, Pisces, Fresh water, QSAR)
EC50 96h - Algae [1]	8,57 mg/l (ECOSAR v1.00, Algae, Fresh water, QSAR)

polymethylene polyphenyl isocyanate (9016-87-9)

LC50 - Other aquatic organisms [1]	> 1000 mg/l (96 h, Literature study)
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reaction products of phosphoryl trichloride and 2-methyloxirane (1244733-77-4)

LC50 - Fish [1]	51 mg/l <i>Pimephalis promelas</i>
EC50 - Crustacea [1]	131 mg/l <i>Daphnia magna</i>

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EC50 72h - Algae [1]	82 mg/l Pseudokirchnerella subcapitata
NOEC chronic crustacea	32 mg/l
NOEC chronic algae	13 mg/l

triethyl phosphate (78-40-0)	
EC50 72h - Algae [1]	901 mg/l (Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus))
NOEC (chronic)	31,6 mg/l (OECD 211, Test organisms (species): Daphnia magna Duration: '21 d')

2,2-bis(bromomethyl)-1,3-propanediol (3296-90-0)	
LC50 - Fish [1]	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
EC50 72h - Algae [1]	37 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
ErC50 algae	150 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)

12.2. Persistence and degradability

dimethyl ether (115-10-6)	
Persistence and degradability	not readily degradable in water.

1,1-difluoroethane (75-37-6)	
Persistence and degradability	Not readily biodegradable in water.

propane (74-98-6)	
Persistence and degradability	Readily biodegradable in water.

isobutane (75-28-5)	
Persistence and degradability	Readily biodegradable in water.

polymethylene polyphenyl isocyanate (9016-87-9)	
Persistence and degradability	not readily degradable in water.

reaction products of phosphoryl trichloride and 2-methyloxirane (1244733-77-4)	
Persistence and degradability	not readily degradable in water.
Biodegradation	14 % OECD 301E

2,2-bis(bromomethyl)-1,3-propanediol (3296-90-0)	
Persistence and degradability	Not readily biodegradable in water.

12.3. Bioaccumulative potential

dimethyl ether (115-10-6)	
Partition coefficient n-octanol/water (Log Pow)	0,1 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

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1,1-difluoroethane (75-37-6)	
Partition coefficient n-octanol/water (Log Pow)	1,13 (QSAR, KOWWIN, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

propane (74-98-6)	
Partition coefficient n-octanol/water (Log Pow)	1,09 – 2,8 (Experimental value, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

isobutane (75-28-5)	
Partition coefficient n-octanol/water (Log Pow)	1,09 – 2,8 (Experimental value, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

polymethylene polyphenyl isocyanate (9016-87-9)	
BCF - Fish [1]	1 (Pisces, Literature study)
Partition coefficient n-octanol/water (Log Pow)	10,46 (Calculated, KOWWIN)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

reaction products of phosphoryl trichloride and 2-methyloxirane (1244733-77-4)	
BCF - Fish [1]	0,8 – 14
Partition coefficient n-octanol/water (Log Pow)	2,68

2,2-bis(bromomethyl)-1,3-propanediol (3296-90-0)	
BCF - Fish [1]	1,1 l/kg (42 - 56 day(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	1,08 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

dimethyl ether (115-10-6)	
Ecology - soil	Not applicable (gas).

1,1-difluoroethane (75-37-6)	
Surface tension	No data available in the literature
Ecology - soil	Not applicable (gas).

propane (74-98-6)	
Ecology - soil	Not applicable (gas).

isobutane (75-28-5)	
Ecology - soil	Not applicable (gas).

polymethylene polyphenyl isocyanate (9016-87-9)	
Partition coefficient n-octanol/water (Log Koc)	9,078 – 10,597 (log Koc, SRC PCKOCWIN v2.0, Calculated value)

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Ecology - soil	Product adsorbs onto the soil.
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reaction products of phosphoryl trichloride and 2-methyloxirane (1244733-77-4)

Partition coefficient n-octanol/water (Log Koc)	2,24
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2,2-bis(bromomethyl)-1,3-propanediol (3296-90-0)

Surface tension	No data available in the literature
Partition coefficient n-octanol/water (Log Koc)	< 1,25 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value)
Ecology - soil	Highly mobile in soil.

12.5. Results of PBT and vPvB assessment

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The product does not meet the PBT and vPvB classification criteria

Component

polymethylene polyphenyl isocyanate (9016-87-9)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
1,1-difluoroethane (75-37-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
isobutane (75-28-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
dimethyl ether (115-10-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
2,2-bis(bromomethyl)-1,3-propanediol (3296-90-0)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
propane (74-98-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Do not discharge into drains or the environment.
Additional information	: Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.
Ecology - waste materials	: Avoid release to the environment.
European List of Waste (LoW) code	: 08 05 01* - waste isocyanates 16 05 04* - gases in pressure containers (including halons) containing dangerous substances 15 01 10* - packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID /

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ADR	IMDG	IATA	ADN	RID
14.1. UN number				
UN 1950	UN 1950	UN 1950	UN 1950	UN 1950
14.2. UN proper shipping name				
AEROSOLS	AEROSOLS	Aerosols, flammable	AEROSOLS	AEROSOLS
Transport document description				
UN 1950 AEROSOLS, 2.1, (D)	UN 1950 AEROSOLS, 2.1	UN 1950 Aerosols, flammable, 2.1	UN 1950 AEROSOLS, 2.1	UN 1950 AEROSOLS, 2.1
14.3. Transport hazard class(es)				
2.1	2.1	2.1	2.1	2.1
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR) : 5F
Special provisions (ADR) : 190, 327, 344, 625
Limited quantities (ADR) : 1I
Excepted quantities (ADR) : E0
Packing instructions (ADR) : P207, LP200
Special packing provisions (ADR) : PP87, RR6, L2
Mixed packing provisions (ADR) : MP9
Transport category (ADR) : 2
Special provisions for carriage - Packages (ADR) : V14
Special provisions for carriage - Loading, unloading and handling (ADR) : CV9, CV12
Special provisions for carriage - Operation (ADR) : S2
Tunnel restriction code (ADR) : D

Transport by sea

Special provisions (IMDG) : 63, 190, 277, 327, 344, 381, 959
Packing instructions (IMDG) : P207, LP200
Special packing provisions (IMDG) : PP87, L2
EmS-No. (Fire) : F-D
EmS-No. (Spillage) : S-U
Stowage category (IMDG) : None
Stowage and handling (IMDG) : SW1, SW22
Segregation (IMDG) : SG69

Air transport

PCA Excepted quantities (IATA) : E0
PCA Limited quantities (IATA) : Y203
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 203
PCA max net quantity (IATA) : 75kg
CAO packing instructions (IATA) : 203
CAO max net quantity (IATA) : 150kg
Special provisions (IATA) : A145, A167, A802
ERG code (IATA) : 10L

Inland waterway transport

Classification code (ADN) : 5F

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Special provisions (ADN)	: 190, 327, 344, 625
Limited quantities (ADN)	: 1 L
Excepted quantities (ADN)	: E0
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01, VE04
Number of blue cones/lights (ADN)	: 1

Rail transport

Classification code (RID)	: 5F
Special provisions (RID)	: 190, 327, 344, 625
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E0
Packing instructions (RID)	: P207, LP200
Special packing provisions (RID)	: PP87, RR6, L2
Mixed packing provisions (RID)	: MP9
Transport category (RID)	: 2
Special provisions for carriage – Packages (RID)	: W14
Special provisions for carriage - Loading, unloading and handling (RID)	: CW9, CW12
Colis express (express parcels) (RID)	: CE2
Hazard identification number (RID)	: 23

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

Reference code	Applicable on	Entry title or description
3(a)	Soudafoam FR	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F
3(b)	Soudafoam FR ; polymethylene polyphenyl isocyanate ; reaction products of phosphoryl trichloride and 2-methyloxirane ; triethyl phosphate	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
40.	dimethyl ether ; 1,1-difluoroethane ; propane ; isobutane	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.
56.	polymethylene polyphenyl isocyanate	Methylenediphenyl diisocyanate (MDI)
56(a)	polymethylene polyphenyl isocyanate	Methylenediphenyl diisocyanate (MDI) isomers: 4,4'-Methylenediphenyl diisocyanate
56(b)	polymethylene polyphenyl isocyanate	Methylenediphenyl diisocyanate (MDI) isomers: 2,4'-Methylenediphenyl diisocyanate
56(c)	polymethylene polyphenyl isocyanate	Methylenediphenyl diisocyanate (MDI) isomers: 2,2'-Methylenediphenyl diisocyanate
74.	polymethylene polyphenyl isocyanate	Diisocyanates, O = C=N-R-N = C=O, with R an aliphatic or aromatic hydrocarbon unit of unspecified length

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

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Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

VOC content : 18,93 % (206.34 g/l)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Section	Changed item	Change	Comments
2.2		Modified	

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration

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RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aerosol 1	Aerosol, Category 1
Carc. 1B	Carcinogenicity, Category 1B
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Gas 1A	Flammable gases, Category 1A
Muta. 1B	Germ cell mutagenicity, Category 1B
Press. Gas	Gases under pressure
Press. Gas (Liq.)	Gases under pressure : Liquefied gas
Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
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.
H335	May cause respiratory irritation.
H340	May cause genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.

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H373	May cause damage to organs through prolonged or repeated exposure.
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Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Aerosol 1	H222;H229	On basis of test data
Skin Irrit. 2	H315	Calculation method
Eye Irrit. 2	H319	Calculation method
Resp. Sens. 1	H334	Calculation method
Skin Sens. 1	H317	Calculation method
Carc. 2	H351	Calculation method
STOT SE 3	H335	Calculation method
STOT RE 2	H373	Calculation method

SDS EU (REACH Annex II)-Soudal

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.