



Soudafoam FR HY

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Reference number: 100000475

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

1.1. Product identifier

Product form : Mixture
Trade name : Soudafoam FR HY
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

Supplier

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

| Country | Organisation/Company | Address | Emergency number | Comment |
|---------|--|------------------------------|------------------|--|
| Belgium | Centre Anti-Poisons/Antigifcentrum c/o Hôpital Militaire Reine Astrid | Rue Bruyn 1 1120 Brussels | +32 70 245 245 | Please dial: 070 245 245 for any urgent questions about intoxication (free of charge 24/7), if not accessible, dial: 02 264 96 30 (standard fee) |

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
Acute toxicity (inhalation:dust,mist) Category 4 H332
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, H335
Respiratory tract irritation
Specific target organ toxicity – Repeated exposure, Category 2 H373
Full text of H- and EUH-statements: see section 16

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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)



Signal word (CLP)

Contains

Hazard statements (CLP)

: Danger
polymethylene polyphenyl isocyanate
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.
H332 - Harmful if inhaled.
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.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P405 - Store locked up.
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
P501 - Dispose of container, contents 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.
As from 24 August 2023 adequate training is required before industrial or professional use.

2.3. Other hazards

The product does not meet the PBT and vPvB classification criteria

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

| 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 |
| 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 |
| 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 |

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The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

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 | CAS-No.: 9016-87-9 | ≥ 25 – < 50 | Carc. 2, H351 Resp. Sens. 1, H334 Skin Sens. 1, H317 Acute Tox. 4 (Inhalation), H332 (ATE=1,5 mg/l/4h) 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 (ATE=632 mg/kg bodyweight) Aquatic Chronic 3, H412 |
| dimethyl ether (Propellant gas (Aerosol)) | CAS-No.: 115-10-6 EC-No.: 204-065-8 EC Index-No.: 603-019-00-8 REACH-no: 01-2119472128-37 | ≥ 10 – < 25 | Flam. Gas 1A, H220 Press. Gas (Liq.), H280 |
| 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 | ≥ 5 – < 10 | Flam. Gas 1A, H220 Press. Gas (Liq.), H280 |
| propane (Propellant gas (Aerosol)) | CAS-No.: 74-98-6 EC-No.: 200-827-9 EC Index-No.: 601-003-00-5 REACH-no: 01-2119486944-21 | ≥ 1 – < 5 | Flam. Gas 1A, H220 Press. Gas (Liq.), H280 |

Comments : polymethylene polyphenyl isocyanate, contains > 0.1% MDI isomers
Product subject to CLP Article 1.1.3.7. The disclosure rules of the components is modified in this case.
Full text of H- and EUH-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.

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| | |
|---------------------------------------|--|
| 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. |

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 dust/fume/gas/mist/vapours/spray. 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. Shovel or sweep up and put in a closed container for disposal. Notify authorities if product enters sewers or public waters. Wash clothing and equipment after handling. Dispose of the material collected according to regulations. |
| 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.

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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 dust/fume/gas/mist/vapours/spray. 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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

isobutane (75-28-5)

Belgium - Occupational Exposure Limits

| | |
|----------------------|---|
| Local name | Butane, tous isomères: iso-butane # Butaan, alle isomeren: iso-butaan |
| OEL STEL | 2370 mg/m³ |
| | 980 ppm |
| Regulatory reference | Koninklijk besluit/Arrêté royal 16/11/2023 |

dimethyl ether (115-10-6)

EU - Indicative Occupational Exposure Limit (IOEL)

| | |
|----------------------|---------------------------------|
| Local name | Dimethylether |
| IOEL TWA | 1920 mg/m³ |
| | 1000 ppm |
| Regulatory reference | COMMISSION DIRECTIVE 2000/39/EC |

Belgium - Occupational Exposure Limits

| | |
|----------------------|--|
| Local name | Oxyde de diméthyle # Dimethylether |
| OEL TWA | 1920 mg/m³ |
| | 1000 ppm |
| Regulatory reference | Koninklijk besluit/Arrêté royal 11/05/2021 |

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propane (74-98-6)

Belgium - Occupational Exposure Limits

| | |
|----------------------|--|
| Local name | Hydrocarbures aliphatiques sous forme gazeuse: (Alcanes C1-C3) # Alifatische koolwaterstoffen in gas-vorm: Alkanen (C1-C3) |
| OEL TWA | 1000 ppm |
| Regulatory reference | Koninklijk besluit/Arrêté royal 16/11/2023 |

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses (EN 166)

8.2.2.2. Skin protection

Skin and body protection:

Protective clothing (EN 14605 or EN 13034)

Hand protection:

Protective gloves against chemicals (EN 374)

Hand protection

| Type | Material | Permeation | Thickness (mm) | Penetration | Standard |
|------|------------------------|-------------------|----------------|-------------|------------|
| | Nitrile rubber (NBR) | 6 (> 480 minutes) | ≥ 0.35 | | EN ISO 374 |
| | Neoprene rubber (HNBR) | 6 (> 480 minutes) | ≥ 0.5 | | EN ISO 374 |

8.2.2.3. Respiratory protection

Respiratory protection:

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

8.2.2.4. Thermal hazards

No additional information available

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8.2.3. Environmental exposure controls

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 |
| Colour | : pink. red. |
| Appearance | : Aerosol. |
| Molecular mass | : > g/mol |
| Odour | : characteristic. |
| Odour threshold | : Not available |
| Melting point | : Not applicable |
| Freezing point | : Not available |
| Boiling point | : Not available |
| Flammability | : Extremely flammable aerosol. |
| Explosive properties | : Pressurised container: May burst if heated. |
| Lower explosion limit | : Not available |
| Upper explosion limit | : Not available |
| Flash point | : Not applicable |
| Auto-ignition temperature | : Not available |
| Decomposition temperature | : Not available |
| pH | : Not available |
| Viscosity, kinematic | : Not available |
| Solubility | : Not available |
| Partition coefficient n-octanol/water (Log Kow) | : Not available |
| Vapour pressure | : Not available |
| Vapour pressure at 50°C | : Not available |
| Density | : 1041 kg/m ³ (20°C) |
| Relative density | : 1,041 (20°C) |
| Relative vapour density at 20°C | : Not available |
| Particle characteristics | : Not applicable |

9.2. Other information

9.2.1. Information with regard to physical hazard classes

% of flammable ingredients : 17,9979092 %

9.2.2. Other safety characteristics

VOC content : ≈ 18,5 % (≈ 192.6 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.

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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.

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Inhalation:dust,mist: Harmful if inhaled.

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| | |
|---------------------|---------------|
| ATE CLP (dust,mist) | 3,296 mg/l/4h |
|---------------------|---------------|

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) |
|--------------------|---|

isobutane (75-28-5)

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

dimethyl ether (115-10-6)

| | |
|-----------------------------|--|
| LC50 Inhalation - Rat [ppm] | 164000 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)) |
|-----------------------------|---|

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 |
|-----------------------|-------------|

Skin corrosion/irritation : Causes skin irritation.

polymethylene polyphenyl isocyanate (9016-87-9)

| | |
|----|-------------------------------------|
| pH | No data available in the literature |
|----|-------------------------------------|

propane (74-98-6)

| | |
|----|-------------------------------------|
| pH | No data available in the literature |
|----|-------------------------------------|

Serious eye damage/irritation : Causes serious eye irritation.

polymethylene polyphenyl isocyanate (9016-87-9)

| | |
|----|-------------------------------------|
| pH | No data available in the literature |
|----|-------------------------------------|

propane (74-98-6)

| | |
|----|-------------------------------------|
| pH | No data available in the literature |
|----|-------------------------------------|

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.

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| polymethylene polyphenyl isocyanate (9016-87-9) | |
|---|---|
| IARC group | 3 - Not classifiable |
| Reproductive toxicity | : Not classified |
| STOT-single exposure | : May cause respiratory irritation. |
| polymethylene polyphenyl isocyanate (9016-87-9) | |
| STOT-single exposure | May cause respiratory irritation. |
| STOT-repeated exposure | : May cause damage to organs through prolonged or repeated exposure. |
| polymethylene polyphenyl isocyanate (9016-87-9) | |
| STOT-repeated exposure | May cause damage to organs through prolonged or repeated exposure (if inhaled). |
| Aspiration hazard | : Not classified |
| Soudafoam FR HY | |
| Vaporizer | Aerosol |
| polymethylene polyphenyl isocyanate (9016-87-9) | |
| Viscosity, kinematic | No data available in the literature |
| isobutane (75-28-5) | |
| Viscosity, kinematic | 0,013 mm²/s |
| propane (74-98-6) | |
| Viscosity, kinematic | No data available in the literature |

11.2. Information on other hazards

No additional information available

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 | |

| polymethylene polyphenyl isocyanate (9016-87-9) | |
|---|--|
| LC50 - Other aquatic organisms [1] | > 1000 mg/l (96 h, Literature study) |
| 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) |
| dimethyl ether (115-10-6) | |
| LC50 - Fish [1] | > 4100 mg/l (NEN 6504: Water - Determination of toxicity with Poecilia reticulata, 96 h, Poecilia reticulata, Semi-static system, Fresh water, Experimental value, Lethal) |
| EC50 - Crustacea [1] | > 4400 mg/l (NEN 6501: Water - Determination of toxicity with Daphnia magna, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Lethal) |
| EC50 96h - Algae [1] | 154,9 mg/l (ECOSAR v1.00, Algae, QSAR, Estimated value) |

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propane (74-98-6)

| | |
|----------------------|--|
| LC50 - Fish [1] | 50 mg/l (96 h, Pisces, Fresh water, QSAR, Estimated value) |
| EC50 96h - Algae [1] | 12 mg/l (ECOSAR v1.00, Algae, Fresh water, QSAR) |

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

| | |
|------------------------|--|
| LC50 - Fish [1] | 51 mg/l Pimephalis promelas |
| EC50 - Crustacea [1] | 131 mg/l Daphnia magna |
| EC50 72h - Algae [1] | 82 mg/l Pseudokirchnerella subcapitata |
| NOEC chronic crustacea | 32 mg/l |
| NOEC chronic algae | 13 mg/l |

12.2. Persistence and degradability

polymethylene polyphenyl isocyanate (9016-87-9)

| | |
|-------------------------------|----------------------------------|
| Persistence and degradability | not readily degradable in water. |
|-------------------------------|----------------------------------|

isobutane (75-28-5)

| | |
|-------------------------------|---------------------------------|
| Persistence and degradability | Readily biodegradable in water. |
|-------------------------------|---------------------------------|

dimethyl ether (115-10-6)

| | |
|-------------------------------|----------------------------------|
| Persistence and degradability | not readily degradable in water. |
|-------------------------------|----------------------------------|

propane (74-98-6)

| | |
|-------------------------------|---------------------------------|
| Persistence and degradability | Readily biodegradable 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 |

12.3. Bioaccumulative potential

polymethylene polyphenyl isocyanate (9016-87-9)

| | |
|---|--|
| BCF - Fish [1] | 268 l/kg (BCFBAF v3.01, Estimated value, Fresh weight) |
| Partition coefficient n-octanol/water (Log Pow) | 10 (Calculated, KOWWIN) |
| Bioaccumulative potential | Low potential for bioaccumulation (BCF < 500). |

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). |

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). |

propane (74-98-6)

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

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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 |

12.4. Mobility in soil

polymethylene polyphenyl isocyanate (9016-87-9)

| | |
|--|---|
| Surface tension | No data available in the literature |
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 9,1 – 11 (log Koc, SRC PCKOCWIN v2.0, Calculated value) |
| Ecology - soil | Product adsorbs onto the soil. |

propane (74-98-6)

| | |
|-----------------|-------------------------------------|
| Surface tension | No data available in the literature |
| Ecology - soil | Not applicable (gas). |

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

| | |
|--|------|
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 2,24 |
|--|------|

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 |
| 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 |
| 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. Endocrine disrupting properties

No additional information available

12.7. 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. |
| Ecological information | : Avoid release to the environment. |

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European List of Waste (LoW, EC 2000/532) : 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

| ADR | IMDG | IATA | ADN | RID |
|--|--|--|--|--|
| 14.1. UN number or ID 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

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| | |
|-----------------------------|-------------|
| 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 |
| 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. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)

| Reference code | Applicable on | Entry title or description |
|----------------|-----------------|--|
| 3(a) | Soudafoam FR HY | 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 |

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| EU restriction list (REACH Annex XVII) | | |
|--|--|---|
| Reference code | Applicable on | Entry title or description |
| 3(b) | Soudafoam FR HY ; polymethylene polyphenyl isocyanate | 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 |
| 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 |

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

VOC Directive (2004/42)

VOC content : $\approx 18,5\%$ (≈ 192.6 g/l)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

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 |
| | according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 | | |

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| 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 |
| 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 |

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| Full text of H- and EUH-statements: | |
|--|--|
| Acute Tox. 4 (Inhalation:dust,mist) | Acute toxicity (inhalation:dust,mist) Category 4 |
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Aerosol 1 | Aerosol, Category 1 |
| Aquatic Chronic 3 | Hazardous to the aquatic environment – Chronic Hazard, Category 3 |
| Carc. 2 | Carcinogenicity, Category 2 |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| Flam. Gas 1A | Flammable gases, Category 1A |
| 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. |
| 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. |
| 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 |

| 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 |
| Acute Tox. 4 (Inhalation:dust,mist) | H332 | Calculation method |
| 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 |

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Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

| | | |
|-----------|------|--------------------|
| STOT RE 2 | H373 | Calculation method |
|-----------|------|--------------------|

Safety Data Sheet (SDS), EU-2023-1

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.