RAW Hand Held Expanding Foam

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Reference number: 100002345
Issue date: 15/05/2018 Revision date: 10/07/2023 Supersedes version of: 13/07/2021 Version: 5.0

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

1.1. Product identifier

Product form : Mixture
Trade name : RAW Hand Held Expanding Foam
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 : Professional use,Consumer 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

Distributor
RAW A/S
C.F. Richs Vej 115, DK-20
Frederiksberg, Denmark
T +45 89343434
www.raw-product.com/da

Distributor
STARK Building Materials UK Limited,
Harry Weston Road, Coventry, CV3 2TT
United Kingdom
T +44 2476608235
www.starkbuild.co.uk

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	NHS 111/NHS 24/NHS Direct		111 0845 4647	or call a doctor

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
Reproductive toxicity, Additional category, Effects on or via lactation	H362
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335
Specific target organ toxicity – Repeated exposure, Category 2	H373
Hazardous to the aquatic environment – Acute Hazard, Category 1	H400
Hazardous to the aquatic environment – Chronic Hazard, Category 1	H410

Full text of H- and EUH-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 harm to breast-fed children. 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. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS02 GHS07 GHS08 GHS09

Signal word (CLP) : Danger

Contains : polymethylene polyphenyl isocyanate; alkanes, C14-17, chloro

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.
H362 - May cause harm to breast-fed children.
H373 - May cause damage to organs through prolonged or repeated exposure.
H410 - Very toxic to aquatic life with long lasting effects.

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 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.
As from 24 August 2023 adequate training is required before industrial or professional use.

2.3. Other hazards

Contains PBTvPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
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
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
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

Component	
alkanes, C14-17, chloro (85535-85-9)	This substance meets the PBT criteria of REACH regulation, annex XIII This substance meets the vPvB criteria of REACH regulation, annex XIII

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 %

Component	
alkanes, C14-17, chloro (85535-85-9)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is 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

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]
alkanes, C14-17, chloro substance listed as REACH Candidate (Medium-chain chlorinated paraffins (MCCP)) PBT substance; vPvB substance	CAS-No.: 85535-85-9 EC-No.: 287-477-0 EC Index-No.: 602-095-00-X REACH-no: 01-2119519269-33	≥ 25 – < 50	Lact., H362 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100) EUH066
polymethylene polyphenyl isocyanate substance with national workplace exposure limit(s) (GB)	CAS-No.: 9016-87-9	≥ 10 – < 25	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
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	≥ 10 – < 25	Flam. Gas 1A, H220 Press. Gas (Liq.), H280
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	≥ 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	≥ 5 – < 10	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.

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

For containment : Collect spillage.
Methods for cleaning up : Leave the product to solidify. Mechanically recover the product. Carefully collect the spill/leftovers. Wash clothing and equipment after handling. Notify authorities if product enters sewers or public waters.
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. Avoid contact during pregnancy/while nursing. 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

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
United Kingdom - Occupational Exposure Limits	
Local name	Dimethyl ether
WEL TWA (OEL TWA)	766 mg/m³
	400 ppm
WEL STEL (OEL STEL)	958 mg/m³
	500 ppm

dimethyl ether (115-10-6)	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

polymethylene polyphenyl isocyanate (9016-87-9)	
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	0.02 mg/m³
WEL STEL (OEL STEL)	0.07 mg/m³

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

alkanes, C14-17, chloro (85535-85-9)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	47.9 mg/kg bw/day
Long-term - systemic effects, inhalation	6.7 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	0.58 mg/kg bw/day
Long-term - systemic effects, inhalation	2 mg/m³
Long-term - systemic effects, dermal	28.75 mg/kg bw/day
PNEC (Water)	
PNEC aqua (freshwater)	1 µg/l
PNEC aqua (marine water)	0.2 µg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	13 mg/kg dwt
PNEC sediment (marine water)	2.6 mg/kg dwt
PNEC (Soil)	
PNEC soil	11.9 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	10 mg/kg food
PNEC (STP)	
PNEC sewage treatment plant	80 mg/l

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:
Protective goggles (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

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	:	white.
Appearance	:	Aerosols.
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	:	Insoluble.
Partition coefficient n-octanol/water (Log Kow)	:	Not available

Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	969.3 kg/m³ (20°C)
Relative density	:	0.969 (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	:	23.3921213 %

9.2.2. Other safety characteristics

VOC content	:	< 24 % (< 232.56 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

Polymerisation risk. Reacts with (some) acids/bases.

10.4. Conditions to avoid

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

10.5. Incompatible materials

Strong acids. Strong bases.

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)	:	Not classified

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))

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)

alkanes, C14-17, chloro (85535-85-9)	
LD50 oral rat	> 4000 mg/kg bodyweight (Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 13500 mg/kg bodyweight (24 h, Rabbit, Read-across, Dermal)
LC50 Inhalation - Rat	> 48.17 mg/l air (1 h, Rat, Read-across, Inhalation (vapours))

Skin corrosion/irritation : Causes skin irritation.

propane (74-98-6)	
pH	No data available in the literature

polymethylene polyphenyl isocyanate (9016-87-9)	
pH	No data available in the literature

Serious eye damage/irritation : Causes serious eye irritation.

propane (74-98-6)	
pH	No data available in the literature

polymethylene polyphenyl isocyanate (9016-87-9)	
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.

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

Reproductive toxicity : May cause harm to breast-fed children.

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

RAW Hand Held Expanding Foam	
Vaporizer	Aerosol

propane (74-98-6)	
Viscosity, kinematic	No data available in the literature

isobutane (75-28-5)	
Viscosity, kinematic	0.013 mm²/s

polymethylene polyphenyl isocyanate (9016-87-9)	
Viscosity, kinematic	No data available in the literature

alkanes, C14-17, chloro (85535-85-9)	
Viscosity, kinematic	90 – 12000 mm²/s (20 °C)

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short–term (acute) : Very toxic to aquatic life.
Hazardous to the aquatic environment, long–term (chronic) : Very toxic to aquatic life with long lasting effects.
Not rapidly degradable

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)

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)

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)

alkanes, C14-17, chloro (85535-85-9)	
LC50 - Fish [1]	> 5000 mg/l (Equivalent or similar to OECD 203, 96 h, Alburnus alburnus, Static system, Brackish water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	0.006 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
ErC50 algae	> 3.2 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, 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.

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.

alkanes, C14-17, chloro (85535-85-9)	
Persistence and degradability	not readily degradable 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).

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).

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]	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).

alkanes, C14-17, chloro (85535-85-9)	
BCF - Fish [1]	6660 – 9140 l/kg (OECD 305: Bioconcentration: Flow-Through Fish Test, 35 day(s), Oncorhynchus mykiss, Flow-through system, Fresh water, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	4.7 – 8.3 (Experimental value, Equivalent or similar to OECD 117)
Bioaccumulative potential	highly bioaccumulative.

12.4. Mobility in soil

propane (74-98-6)	
Surface tension	No data available in the literature
Ecology - soil	Not applicable (gas).

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.

alkanes, C14-17, chloro (85535-85-9)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	5 – 5.2 (log Koc, Experimental value)
Ecology - soil	Low potential for mobility in soil.

12.5. Results of PBT and vPvB assessment

Component	
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

Component	
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
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
alkanes, C14-17, chloro (85535-85-9)	This substance meets the PBT criteria of REACH regulation, annex XIII This substance meets 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

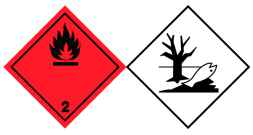
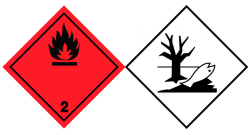
SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : This material and its container must be disposed of as hazardous waste.
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.
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), ENVIRONMENTALLY HAZARDOUS	UN 1950 AEROSOLS, 2.1, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 1950 Aerosols, flammable, 2.1, ENVIRONMENTALLY HAZARDOUS	UN 1950 AEROSOLS, 2.1, ENVIRONMENTALLY HAZARDOUS	UN 1950 AEROSOLS, 2.1, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)				
2.1	2.1	2.1	2.1	2.1
				

ADR	IMDG	IATA	ADN	RID
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
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) : 1l
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
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)	RAW Hand Held Expanding Foam	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)	RAW Hand Held Expanding Foam ; polymethylene polyphenyl isocyanate ; alkanes, C14-17, chloro	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
3(c)	RAW Hand Held Expanding Foam ; alkanes, C14-17, chloro	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 class 4.1
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 substance(s) listed on the REACH Candidate List in concentrations ≥ 0.1 % or SCL: alkanes, C14-17, chloro (EC 287-477-0, CAS 85535-85-9)

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 : < 24 % (< 232.56 g/l)

Seveso Directive (Disaster Risk Reduction)

Seveso Additional information : E1; P3A

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		
8.2		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

Abbreviations and acronyms:	
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
Aerosol 1	Aerosol, Category 1
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Carc. 2	Carcinogenicity, Category 2
EUH066	Repeated exposure may cause skin dryness or cracking.
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.
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.

Full text of H- and EUH-statements:	
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H362	May cause harm to breast-fed children.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
Lact.	Reproductive toxicity, Additional category, Effects on or via lactation
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
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
Lact.	H362	Calculation method
STOT SE 3	H335	Calculation method
STOT RE 2	H373	Calculation method
Aquatic Acute 1	H400	Calculation method
Aquatic Chronic 1	H410	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.