

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

1.1. Product identifier

Product form : Mixture
Trade name : Parafoam NBS
Vaporizer : Aerosol

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

1.2.1. Relevant identified uses

Main use category : Professional use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

DL CHEMICALS N.V.
Roterijstraat 201-203
B-8793 Waregem
Belgium
T + 32 56 62 70 51, F + 32 56 60 95 68
SDS@dl-chem.com, www.dl-chem.com

1.4. Emergency telephone number

Emergency number : + 32 56 62 70 51
Only available during office hours.

Country/Area	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER	+44 20 7188 7188	

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 (inhal.), 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
Reproductive toxicity, Additional category, Effects on or via lactation	H362

Parafoam NBS

Safety Data Sheet

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

Specific target organ toxicity – Single exposure, H335

Category 3, Respiratory tract irritation

Specific target organ toxicity – Repeated exposure, H373

Category 2

Hazardous to the aquatic environment – Chronic H413

Hazard, Category 4

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS02

GHS07

GHS08

CLP Signal word

: Danger

Contains

: 4,4'-methylenediphenyl diisocyanate, isomers and homologues; alkanes, C14-17, chloro

Hazard statements (CLP)

: Extremely flammable aerosol.

Pressurised container: May burst if heated.

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.

Harmful if inhaled.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause respiratory irritation.

Suspected of causing cancer.

May cause harm to breast-fed children.

May cause damage to organs through prolonged or repeated exposure.

May cause long lasting harmful effects to aquatic life.

Precautionary statements (CLP)

: 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.

Wear protective gloves, protective clothing, eye protection, face protection.

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

Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

Extra phrases

: 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	
Substance(s) meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	alkanes, C14-17, chloro (85535-85-9), octamethylcyclotetrasiloxane; [D4] (556-67-2) ⁽¹⁾
Substance(s) meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	alkanes, C14-17, chloro (85535-85-9), octamethylcyclotetrasiloxane; [D4] (556-67-2) ⁽¹⁾

⁽¹⁾ Substance(s) in concentration below 0.1 % and displayed on a voluntary basis

Parafoam NBS

Safety Data Sheet

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

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	
Substance(s) 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	alkanes, C14-17, chloro (85535-85-9), octamethylcyclotetrasiloxane; [D4] (556-67-2) ⁽¹⁾

⁽¹⁾ Substance(s) in concentration below 0.1 % and displayed on a voluntary basis

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]
4,4'-methylenediphenyl diisocyanate, isomers and homologues	CAS-No.: 9016-87-9 EC-No.: 618-498-9	≥ 10 – < 50	Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373
alkanes, C14-17, chloro substance listed on REACH Candidate List (Medium-chain chlorinated paraffins (MCCP))	CAS-No.: 85535-85-9 EC-No.: 287-477-0 EC Index-No.: 602-095-00-X REACH-no: 01-2119519269-33	≥ 10 – < 25	Lact., H362 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) EUH066
isobutane	CAS-No.: 75-28-5 EC-No.: 200-857-2 EC Index-No.: 601-004-00-0 REACH-no: 01-2119485395-27	≥ 2,5 – < 10	Flam. Gas 1A, H220 Press. Gas (Liq.), H280
dimethyl ether	CAS-No.: 115-10-6 EC-No.: 204-065-8 EC Index-No.: 603-019-00-8 REACH-no: 01-2119472128-37	≥ 2,5 – < 10	Flam. Gas 1A, H220 Press. Gas (Liq.), H280

Parafoam NBS

Safety Data Sheet

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

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
propane	CAS-No.: 74-98-6 EC-No.: 200-827-9 EC Index-No.: 601-003-00-5 REACH-no: 01-2119486944-21	≥ 2,5 – < 10	Flam. Gas 1A, H220 Press. Gas (Liq.), H280
Propane-1,2-diol, propoxylated	CAS-No.: 25322-69-4 EC-No.: 500-039-8 REACH-no: 01-2119493630-37	< 5	Acute Tox. 4 (Oral), H302 (ATE=1000 mg/kg bodyweight)
Glycerol, propoxylated	CAS-No.: 25791-96-2 EC-No.: 500-044-5 REACH-no: 01-2119484612-36	< 2,5	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight)
octamethylcyclotetrasiloxane; [D4] substance listed on REACH Candidate List (Octamethylcyclotetrasiloxane) substance with a Community workplace exposure limit	CAS-No.: 556-67-2 EC-No.: 209-136-7 EC Index-No.: 014-018-00-1 REACH-no: 01-2119529238-36	< 0,1	Repr. 2, H361f Aquatic Chronic 1, H410 (M=10)

Specific concentration limits:

Name	Product identifier	Specific concentration limits (%)
4,4'-methylenediphenyl diisocyanate, isomers and homologues	CAS-No.: 9016-87-9 EC-No.: 618-498-9	(0,1 ≤ C < 100) Resp. Sens. 1; H334 (5 ≤ C < 100) Skin Irrit. 2; H315 (5 ≤ C < 100) Eye Irrit. 2; H319 (5 ≤ C < 100) STOT SE 3; H335

Product subject to CLP Annex I, item 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.
First-aid measures after inhalation	: Take victim to fresh air, in a quiet place and if necessary take medical advice. If breathing is difficult, give oxygen. If breathing stops, give artificial respiration.
First-aid measures after skin contact	: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.
First-aid measures after eye contact	: Rinse opened eye for several minutes under running water. Then consult doctor. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion	: Do not induce vomiting. Rinse mouth out with water.

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

Symptoms/effects after inhalation	: Irritation of the respiratory tract.
Symptoms/effects after skin contact	: Irritating to skin. Skin rash/inflammation. Allergic skin rash.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: Ingestion may cause nausea and vomiting. Irritating to the digestive tract. . Abdominal pain.
Chronic symptoms	: May cause cancer. May cause harm to breast-fed children.

Parafoam NBS

Safety Data Sheet

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

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

No additional information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : ABC-powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic substances.

5.3. Advice for firefighters

Firefighting instructions : Cool down the containers exposed to heat with a water spray.
Other information : Prevent fire fighting water from entering the environment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Concerning personal protective equipment to use, see item 8.
Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection. Equip rescue crew with proper protection.

6.2. Environmental precautions

Do not allow into drains or water courses. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Cover spill with non combustible material, e.g.: sand, earth, vermiculite.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Refer to Section 10 on Incompatible Materials.
Precautions for safe handling : This material can accumulate static charge by flow or agitation and can be ignited by static discharge. Keep container tight closed.
Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store tightly closed in a dry, cool and well-ventilated place.
Incompatible materials : Heat sources. Keep away from food and drink.
Storage temperature : 5 – 30 °C

Parafoam NBS

Safety Data Sheet

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

Heat and ignition sources : Keep away from heat and direct sunlight.

7.3. Specific end use(s)

Adhesives, sealants.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

4,4'-methylenediphenyl diisocyanate, isomers and homologues (9016-87-9)

EU - Indicative Occupational Exposure Limit (IOEL)

IOEL TWA	0,005 ppm
----------	-----------

dimethyl ether (115-10-6)

EU - Indicative Occupational Exposure Limit (IOEL)

IOEL TWA	1920 mg/m ³
	1000 ppm

Ireland - Occupational Exposure Limits

OEL STEL	1920 mg/m ³
	1000 ppm

United Kingdom - Occupational Exposure Limits

WEL TWA (OEL TWA)	400 mg/m ³
	766 ppm
WEL STEL (OEL STEL)	958 mg/m ³
	500 ppm

octamethylcyclotetrasiloxane; [D4] (556-67-2)

EU - Indicative Occupational Exposure Limit (IOEL)

IOEL TWA	123 mg/m ³
	10 ppm

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 bodyweight/day
Long-term - systemic effects, inhalation	6,7 mg/m ³

DNEL/DMEL (General population)

Long-term - systemic effects, oral	0,58 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	2 mg/m ³

Parafoam NBS

Safety Data Sheet

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

alkanes, C14-17, chloro (85535-85-9)	
Long-term - systemic effects, dermal	28,75 mg/kg bodyweight/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
dimethyl ether (115-10-6)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, inhalation	1894 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects, inhalation	471 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	0,155 mg/l
PNEC aqua (marine water)	0,016 mg/l
PNEC aqua (intermittent, freshwater)	1,549 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0,681 mg/kg dwt
PNEC sediment (marine water)	0,069 mg/kg dwt
PNEC (Soil)	
PNEC soil	0,045 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	160 mg/l
Propane-1,2-diol, propoxylated (25322-69-4)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	84 mg/kg bodyweight/day
Long-term - local effects, inhalation	10 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	24 mg/kg bw/day
Long-term - systemic effects, dermal	51 mg/kg bodyweight/day
Long-term - local effects, inhalation	10 mg/m³

Parafoam NBS

Safety Data Sheet

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

Propane-1,2-diol, propoxylated (25322-69-4)	
PNEC (Water)	
PNEC aqua (freshwater)	0,1 mg/l
PNEC aqua (marine water)	0,01 mg/l
PNEC aqua (intermittent, freshwater)	1 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0,765 mg/kg dwt
PNEC sediment (marine water)	0,0765 mg/kg dwt
PNEC (Soil)	
PNEC soil	0,109 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	100 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Local exhaust and general ventilation must be adequate to meet exposure standards. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

8.2.2. Personal protection equipment

Personal protective equipment:

Face shield.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection			
Type	Field of application	Characteristics	Standard
Face shield	Droplet		EN 166, EN 167, EN 168

8.2.2.2. Skin protection

Skin and body protection	
Type	Standard
complete protective suit against chemicals	EN 1149-1, EN 1149-2, EN 1149-3, EN 13034, EN ISO 13982-1, EN ISO 6529, EN ISO 6530, EN 464

Parafoam NBS

Safety Data Sheet

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

Skin and body protection	
Type	Standard
Chemical resistant safety shoes	EN 13832, EN ISO 20345

Hand protection:

Time of penetration is to be checked with the glove producer. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves					EN ISO 374-1, EN 374-3, EN 420

Other skin protection		
Materials for protective clothing		
Condition	Material	Standard
Good resistance:		EN 1149-1, EN 1149-2, EN 1149-3, EN 13034, EN ISO 13982-1, EN ISO 6529, EN ISO 6530, EN 464

8.2.2.3. Respiratory protection

Respiratory protection			
Device	Filter type	Condition	Standard
Gas mask	Extra personal protection: A/P2 filter respirator for organic vapour and harmful dust	Vapour protection, Gas protection, Protection for Solid particles	EN 149, EN 405

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Do not allow to enter drains or water courses.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Aerosol
Colour	: light yellow.
Molecular mass	: 324,46 g/mol
Odour	: Not available
Odour threshold	: Not applicable Not applicable

Parafoam NBS

Safety Data Sheet

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

Melting point	: Not applicable
Freezing point	: Not applicable
Softening point	: Not applicable
Boiling point	: -12 °C Aerosol propellant
Flammability	: Not available
Explosive properties	: Product is not explosive.
Oxidising properties	: Non oxidizing material according to EC criteria.
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: 460 °C Aerosol propellant
Decomposition temperature	: Not available
pH	: Not applicable.
Viscosity, kinematic	: Not applicable.
Viscosity, dynamic	: Not applicable.
Solubility	: Water: Not applicable
Partition coefficient n-octanol/water (Log Kow)	: Not applicable for preparations
Partition coefficient n-octanol/water (Log Pow)	: Not applicable for preparations
Vapour pressure	: 300 – 510 kPa
Vapour pressure at 50°C	: Not available
Density	: 985 – 1000 kg/m ³
Relative density	: Not applicable
Relative vapour density at 20°C	: Does not apply
Particle characteristics	: Not applicable

alkanes, C14-17, chloro

Boiling point	> 200 °C Decomposes before boiling
Flash point	> 210 °C Remarks on result: 'other:'
Vapour pressure	0,000001 – 0,000002 mm Hg

dimethyl ether

Vapour pressure	3850 mm Hg Temp.: 25 °C
-----------------	-------------------------

Glycerol, propoxylated

Flash point	163 °C
Auto-ignition temperature	305 °C
Vapour pressure	0,003 Pa at 20 °C

Propane-1,2-diol, propoxylated

Flash point	150 – 225 °C
-------------	--------------

octamethylcyclotetrasiloxane; [D4]

Boiling point	175 °C
Flash point	51 °C
Auto-ignition temperature	384 °C
Vapour pressure	132 Pa at 25°C

Parafoam NBS

Safety Data Sheet

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

9.2. Other information

9.2.1. Information with regard to physical hazard classes

% of flammable ingredients : 30,1 %

9.2.2. Other safety characteristics

VOC content : 20,18 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

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

heat. High temperature. Heating will cause a rise in pressure with a risk of bursting. Direct sunlight.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide.

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) : Harmful if inhaled.

Parafoam NBS

ATE CLP (gases)	4500 ppmv/4h
ATE CLP (vapours)	11 mg/l/4h
ATE CLP (dust,mist)	1,5 mg/l/4h

4,4'-methylenediphenyl diisocyanate, isomers and homologues (9016-87-9)

LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat	11 mg/l
LC50 Inhalation - Rat (Dust/Mist)	1,5 mg/l/4h
LC50 Inhalation - Rat (Vapours)	11 mg/l/4h

isobutane (75-28-5)

LD50 oral	> 2000 mg/kg
LD50 dermal	> 2000 mg/kg

Parafoam NBS

Safety Data Sheet

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

isobutane (75-28-5)	
LC50 Inhalation - Rat	> 5 mg/l
LC50 Inhalation - Rat [ppm]	570000 ppm IUCLID
alkanes, C14-17, chloro (85535-85-9)	
LD50 oral rat	> 4000 mg/kg bodyweight Animal: rat, Remarks on results: other:
LD50 dermal rat	> 2000 mg/kg
LC50 Inhalation - Rat	> 20 mg/l
dimethyl ether (115-10-6)	
LD50 oral	> 2000 mg/kg
LD50 dermal	> 2000 mg/kg
LC50 Inhalation - Rat	308,5 mg/l/4h
LC50 Inhalation - Rat [ppm]	164000 ppm Animal: rat, Animal sex: male, 95% CL: 142000 - 203000
propane (74-98-6)	
LD50 oral	> 2000 mg/kg
LD50 dermal	> 2000 mg/kg
LC50 Inhalation - Rat	> 5 mg/l
Glycerol, propoxylated (25791-96-2)	
LD50 oral rat	> 500 mg/kg (OECD 401 method)
LD50 dermal rat	> 2000 mg/kg (OECD 402 method)
LC50 Inhalation - Rat	> 20 mg/l
Propane-1,2-diol, propoxylated (25322-69-4)	
LD50 oral rat	1000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat	> 20 mg/l
octamethylcyclotetrasiloxane; [D4] (556-67-2)	
LD50 oral rat	61440 mg/kg
LD50 dermal rat	> 10000 mg/kg bodyweight
LC50 Inhalation - Rat	> 20 mg/l/4h (OECD 403 method)
LC50 Inhalation - Rat (Vapours)	2975 mg/l/4h
Skin corrosion/irritation	: Causes skin irritation. pH: Not applicable.
Serious eye damage/irritation	: Causes serious eye irritation. pH: Not applicable.
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.
Reproductive toxicity	: May cause harm to breast-fed children.
STOT-single exposure	: May cause respiratory irritation.

Parafoam NBS

Safety Data Sheet

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

4,4'-methylenediphenyl diisocyanate, isomers and homologues (9016-87-9)

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

4,4'-methylenediphenyl diisocyanate, isomers and homologues (9016-87-9)

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

alkanes, C14-17, chloro (85535-85-9)

NOAEL (oral, rat, 90 days)	100 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
----------------------------	---

octamethylcyclotetrasiloxane; [D4] (556-67-2)

LOAEL (dermal, rat/rabbit, 90 days)	≈ 950 mg/kg bodyweight/day
NOAEL (dermal, rat/rabbit, 90 days)	950 mg/kg bodyweight/day

Aspiration hazard : Not applicable

Parafoam NBS

Vaporizer	Aerosol
Viscosity, kinematic	Not applicable.

alkanes, C14-17, chloro (85535-85-9)

Viscosity, kinematic	90 – 12000 mm ² /s
----------------------	-------------------------------

octamethylcyclotetrasiloxane; [D4] (556-67-2)

Viscosity, kinematic	1,6 mm ² /s at 20°C
----------------------	--------------------------------

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

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

Hazardous to the aquatic environment, long-term (chronic) : May cause long lasting harmful effects to aquatic life.

Parafoam NBS

EC50 - Crustacea [1]	1000 mg/l daphnia
EC50 72h - Algae [1]	1000 mg/l Desmodesmus subspicatus

4,4'-methylenediphenyl diisocyanate, isomers and homologues (9016-87-9)

LC50 - Fish [1]	> 1000 mg/l (OECD 203 method)
EC50 - Crustacea [1]	> 1000 mg/l (OECD 202 method)
EC50 - Other aquatic organisms [2]	≥ 100 mg/l Bacteria
EC50 72h - Algae [1]	> 1640 mg/l (OECD 201 method)
ErC50 algae	72h 1640 mg/l (OECD 201 method)
NOEC (chronic)	≥ 10000 mg/l Daphnia magna (Big water flea)

Parafoam NBS

Safety Data Sheet

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

4,4'-methylenediphenyl diisocyanate, isomers and homologues (9016-87-9)

NOEC chronic crustacea	≥ 10 mg/l (OECD 211 method)
------------------------	-----------------------------

alkanes, C14-17, chloro (85535-85-9)

LC50 - Fish [1]	> 10000 mg/l Test organisms (species): <i>Alburnus alburnus</i>
LC50 - Fish [2]	> 5000 mg/l Test organisms (species): <i>Alburnus alburnus</i>
EC50 - Crustacea [1]	0,0059 mg/l Test organisms (species): <i>Daphnia magna</i>
EC50 72h - Algae [1]	> 3,2 mg/l Test organisms (species): <i>Pseudokirchneriella subcapitata</i> (previous names: <i>Raphidocelis subcapitata</i> , <i>Selenastrum capricornutum</i>)
EC50 96h - Algae [1]	> 3,2 mg/l Test organisms (species): <i>Pseudokirchneriella subcapitata</i> (previous names: <i>Raphidocelis subcapitata</i> , <i>Selenastrum capricornutum</i>)
LOEC (chronic)	0,018 mg/l Test organisms (species): <i>Daphnia magna</i> Duration: '21 d'
NOEC (chronic)	0,01 mg/l Test organisms (species): <i>Daphnia magna</i> Duration: '21 d'
NOEC chronic fish	4,5 mg/l Test organisms (species): <i>Oncorhynchus mykiss</i> (previous name: <i>Salmo gairdneri</i>) Duration: '60 d'

dimethyl ether (115-10-6)

LC50 - Fish [1]	> 4,1 g/l Test organisms (species): <i>Poecilia reticulata</i>
EC50 - Crustacea [1]	> 4,4 g/l Test organisms (species): <i>Daphnia magna</i>
EC50 96h - Algae [1]	154,917 mg/l Test organisms (species): other:green algae
NOEC (acute)	≥ 4000 mg/l <i>Daphnia Magna</i>
NOEC (chronic)	≥ 4000 mg/l <i>Poecilia reticulata</i>

Glycerol, propoxylated (25791-96-2)

LC50 - Fish [1]	> 1000 mg/l
EC50 - Crustacea [1]	> 100 mg/l
ErC50 algae	> 100 mg/l
LOEC (chronic)	> 10 mg/l
NOEC chronic crustacea	> 10 mg/l (OECD 211 method)

Propane-1,2-diol, propoxylated (25322-69-4)

LC50 - Fish [1]	650 – 1700 mg/l
-----------------	-----------------

octamethylcyclotetrasiloxane; [D4] (556-67-2)

LC50 - Fish [1]	> 0,0063 mg/l
EC50 - Crustacea [1]	> 0,0091 mg/l
EC50 72h - Algae [1]	> 0,022 mg/l
ErC50 algae	> 0,022 mg/l
NOEC chronic fish	≥ 0,0044 mg/l
NOEC chronic crustacea	> 0,0079 mg/l

12.2. Persistence and degradability

Parafoam NBS	
Persistence and degradability	Rapidly degradable

Parafoam NBS

Safety Data Sheet

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

4,4'-methylenediphenyl diisocyanate, isomers and homologues (9016-87-9)	
Persistence and degradability	Not easily bio-degradable (according to OECD-criteria).
Biodegradation	28d 0 %
isobutane (75-28-5)	
Persistence and degradability	Readily biodegradable.
alkanes, C14-17, chloro (85535-85-9)	
Persistence and degradability	Rapidly degradable
dimethyl ether (115-10-6)	
Persistence and degradability	Rapidly degradable
propane (74-98-6)	
Persistence and degradability	Readily biodegradable.
Glycerol, propoxylated (25791-96-2)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	38 – 40 % (OECD 301B method)
Propane-1,2-diol, propoxylated (25322-69-4)	
Persistence and degradability	Rapidly degradable
octamethylcyclotetrasiloxane; [D4] (556-67-2)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	28d 3,7 % (OECD 310 method)

12.3. Bioaccumulative potential

Parafoam NBS	
Partition coefficient n-octanol/water (Log Pow)	Not applicable for preparations
Partition coefficient n-octanol/water (Log Kow)	Not applicable for preparations
4,4'-methylenediphenyl diisocyanate, isomers and homologues (9016-87-9)	
BCF - Fish [1]	200
Bioaccumulative potential	highly bioaccumulative.
isobutane (75-28-5)	
Bioconcentration factor (BCF REACH)	27
Partition coefficient n-octanol/water (Log Pow)	2,76
Bioaccumulative potential	Low bioaccumulation potential.
alkanes, C14-17, chloro (85535-85-9)	
Partition coefficient n-octanol/water (Log Pow)	5,47 – 8,01
propane (74-98-6)	
Bioconcentration factor (BCF REACH)	13
Partition coefficient n-octanol/water (Log Pow)	2,86
Bioaccumulative potential	Low bioaccumulation potential.

Parafoam NBS

Safety Data Sheet

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

Glycerol, propoxylated (25791-96-2)	
Partition coefficient n-octanol/water (Log Pow)	-0,73 at 25 °C
octamethylcyclotetrasiloxane; [D4] (556-67-2)	
Bioconcentration factor (BCF REACH)	12400
Partition coefficient n-octanol/water (Log Pow)	6,48 at 25.1°C

12.4. Mobility in soil

isobutane (75-28-5)	
Surface tension	0,00984 N/m
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1,54
Ecology - soil	Very mobile.

dimethyl ether (115-10-6)

Surface tension	0,001136 N/m
-----------------	--------------

propane (74-98-6)

Surface tension	0,00702 N/m
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2,66 7.02E-3 N/m (25°C)
Ecology - soil	medium.

Glycerol, propoxylated (25791-96-2)

Surface tension	53 mN/m at 20 °C
-----------------	------------------

12.5. Results of PBT and vPvB assessment

Component	
Substance(s) meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	alkanes, C14-17, chloro (85535-85-9), octamethylcyclotetrasiloxane; [D4] (556-67-2)(¹)
Substance(s) meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	alkanes, C14-17, chloro (85535-85-9), octamethylcyclotetrasiloxane; [D4] (556-67-2)(¹)

(¹) Substance(s) in concentration below 0.1 % and displayed on a voluntary basis

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : The substance/mixture has no endocrine disrupting properties.

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

European List of Waste (LoW, EC 2000/532) : 16 05 04* - gases in pressure containers (including halons) containing dangerous substances

Parafoam NBS

Safety Data Sheet

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

HP Code

: HP3 - "Flammable:"

– flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C;

– flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air;

– flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction;

– flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa;

– water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities;

– other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.

HP5 - "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration.

HP6 - "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure.

HP7 - "Carcinogenic:" waste which induces cancer or increases its incidence

HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.

HP13 - "Sensitising:" waste which contains one or more substances known to cause sensitising effects to the skin or the respiratory organs.

HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

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

Parafoam NBS

Safety Data Sheet

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

ADR	IMDG	IATA	ADN	RID
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, LP02
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, 959
Limited quantities (IMDG)	: SP277
Excepted quantities (IMDG)	: E0
Packing instructions (IMDG)	: P207, LP02
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

Parafoam NBS

Safety Data Sheet

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

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, LP02
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
74.	Parafoam NBS	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 $\geq 0.1\%$ or SCL: Medium-chain chlorinated paraffins (MCCP) (EC 287-477-0, CAS 85535-85-9)

Contains substance(s) listed on the REACH Candidate List $< 0.1\%$ or SCL: Octamethylcyclotetrasiloxane (EC 209-136-7, CAS 556-67-2).

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 2024/590 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

VOC Directive (2004/42)

VOC content : 20,18 %

Parafoam NBS

Safety Data Sheet

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

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

Germany

Air Quality Control (TA Luft)					
Category	Class	Applicable on	Local name	Max. mass flow	Max. mass concentration

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Indication of changes:

Hazards identification.

Abbreviations and acronyms:

CAS-No.	Chemical Abstract Service number
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
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
EC-No.	European Community number
EN	European Standard
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEL	No-Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic

Parafoam NBS

Safety Data Sheet

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

Abbreviations and acronyms:	
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	Sewage treatment plant
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

Data sources : ECHA (European Chemicals Agency). Supplier's safety documents.
Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

Full text of H- and EUH-statements:	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), 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
Aquatic Chronic 4	Hazardous to the aquatic environment – Chronic Hazard, Category 4
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Gas 1A	Flammable gases, Category 1A
Lact.	Reproductive toxicity, Additional category, Effects on or via lactation
Press. Gas (Liq.)	Gases under pressure : Liquefied gas
Repr. 2	Reproductive toxicity, Category 2
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.

Parafoam NBS

Safety Data Sheet

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

Full text of H- and EUH-statements:	
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.
H361f	Suspected of damaging fertility.
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.
H413	May cause long lasting harmful effects to aquatic life.
EUH066	Repeated exposure may cause skin dryness or cracking.

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)	H332	
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 Chronic 4	H413	Expert judgement

SDS EU DL Chemicals

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.