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

1.1. Product identifier

Product form : Mixture
Trade name : Parafoam FR 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
Roterijstraat 201-203
B-8793 Waregem - Belgium
T + 32 56 62 70 51 - F + 32 56 60 95 68
info@dl-chem.com - www.dl-chem.com

1.4. Emergency telephone number

Emergency number : + 32 70 245 245

Country	Official advisory body	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
Malta	Medicines & Poisons Info Office	Mater Dei Hospital MSD Msida	+356 2545 6504	
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+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
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Respiratory sensitisation, Category 1	H334
Skin sensitisation, Category 1	H317
Carcinogenicity, Category 2	H351
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H335
Specific target organ toxicity — Repeated exposure, Category 2	H373

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

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

Hazardous ingredients : 4,4'-methylenediphenyl diisocyanate, isomers and homologues

Hazard statements (CLP) : H222 - Extremely flammable aerosol.
H229 - Pressurised container: May burst if heated.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 - May cause respiratory irritation.
H351 - Suspected of causing cancer.
H373 - May cause damage to organs through prolonged or repeated exposure.

Precautionary statements (CLP) : 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.
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective clothing, protective gloves, eye protection, face protection.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

EUH-statements : EUH204 - Contains isocyanates. May produce an allergic reaction.

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
This product contains a fluorinated greenhouse gas

2.3. Other hazards

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

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	40 - <60	Acute Tox. 4 (Inhalation), 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

Polymer with 2-Butyne-1,4-Diol and (Chloromethyl-)Oxirane, Brominated, Dehydrochlorinated, Methoxylated	(CAS-No.) 86675-46-9 (EC-No.) 617-903-6 (REACH-no) 01-2119972940-30	10 - <20	Acute Tox. 4 (Oral), H302
TCPP_Tris(2-chloro-1-methylethyl) phosphate_multiconstituent substance	(EC-No.) 911-815-4 (REACH-no) 01-2119486772-26	10 - <20	Acute Tox. 4 (Oral), H302
1,1-difluoroethane	(CAS-No.) 75-37-6 (EC-No.) 200-866-1 (REACH-no) 01-2119474440-43	5 - <10	Flam. Gas 1, H220 Press. Gas (Comp.), H280
isobutane (Note C)(Note U)	(CAS-No.) 75-28-5 (EC-No.) 200-857-2 (EC Index-No.) 601-004-00-0 (REACH-no) 01-2119485395-27	2,5 - <5	Flam. Gas 1, H220 Press. Gas (Comp.), H280
dimethyl ether (Note U)	(CAS-No.) 115-10-6 (EC-No.) 204-065-8 (EC Index-No.) 603-019-00-8 (REACH-no) 01-2119472128-37	2,5 - <5	Flam. Gas 1, H220 Press. Gas (Comp.), H280
triethyl phosphate	(CAS-No.) 78-40-0 (EC-No.) 201-114-5 (EC Index-No.) 015-013-00-7 (REACH-no) 01-2119492852-28	1 - <2,5	Acute Tox. 4 (Oral), H302
propane (Note U)	(CAS-No.) 74-98-6 (EC-No.) 200-827-9 (EC Index-No.) 601-003-00-5 (REACH-no) 01-2119486944-21	1 - <2,5	Flam. Gas 1, H220 Press. Gas (Comp.), H280

Note C : Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

Note U (Table 3): When put on the market gases have to be classified as 'Gases under pressure', in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case.

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : In all cases of doubt, or when symptoms persist, seek medical attention. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Take victim to fresh air, in a quiet place in an half laying position, do artificial respiration if necessary and urgently take medical advice.

First-aid measures after skin contact : After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. If necessary seek medical advice.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice (show the label where possible).

First-aid measures after ingestion : Do not induce vomiting. Vomiting: prevent asphyxia/aspiration pneumonia. Keep at rest. Rinse mouth out with water.

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

No additional information available

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. Alcohol resistant foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use water.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes.

5.3. Advice for firefighters

Firefighting instructions : Cool down the containers exposed to heat with a water spray.

Protection during firefighting : Use self-contained breathing apparatus and chemically protective clothing.

Other information : Prevent fire fighting water from entering the environment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

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

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Absorb remaining liquid with sand or inert absorbent and remove to safe place. Do not absorb in saw-dust or other combustible absorbents.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep container tight closed.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry, cool and well-ventilated place.

Heat and ignition sources : Store away from direct sunlight or other heat sources.

Storage area : Keep away from food and drink.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

4,4'-methylenediphenyl diisocyanate, isomers and homologues (9016-87-9)		
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	0,05 mg/m³
Germany	TRGS 900 Limitation of exposure peaks (mg/m³)	0,05 mg/m³

isobutane (75-28-5)		
Belgium	Limit value (ppm)	1000 ppm
France	VME (mg/m³)	1900 mg/m³
France	VME (ppm)	800 ppm
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	2400 mg/m³
Germany	TRGS 900 Occupational exposure limit value (ppm)	1000 ppm
Germany	TRGS 900 Limitation of exposure peaks (mg/m³)	9600 mg/m³
Germany	TRGS 900 Limitation of exposure peaks (ppm)	4000 ppm
Switzerland	MAK (mg/m³)	1900 mg/m³
Switzerland	MAK (ppm)	800 ppm

dimethyl ether (115-10-6)		
EU	IOELV TWA (mg/m³)	1920 mg/m³
EU	IOELV TWA (ppm)	1000 ppm
Austria	MAK (mg/m³)	1910 mg/m³
Austria	MAK (ppm)	1000 ppm
Austria	MAK Short time value (mg/m³)	3920 mg/m³
Austria	MAK Short time value (ppm)	2000 ppm
Belgium	Limit value (mg/m³)	1920 mg/m³
Belgium	Limit value (ppm)	1000 ppm

dimethyl ether (115-10-6)		
Denmark	Grænseværdie (langvarig) (mg/m³)	3770 mg/m³
Denmark	Grænseværdie (langvarig) (ppm)	2000 ppm
Denmark	Grænseværdie (kortvarig) (mg/m³)	1885 mg/m³
Denmark	Grænseværdie (kortvarig) (ppm)	1000 ppm
France	VLE (mg/m³)	1920 mg/m³
France	VLE (ppm)	1000 ppm
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	1900 mg/m³
Germany	TRGS 900 Occupational exposure limit value (ppm)	1000 ppm
Germany	TRGS 900 Limitation of exposure peaks (mg/m³)	15200 mg/m³
Germany	TRGS 900 Limitation of exposure peaks (ppm)	8000 ppm
Hungary	AK-érték	1920 mg/m³
Hungary	CK-érték	7680 mg/m³
Ireland	OEL (15 min ref) (mg/m3)	1920 mg/m³
Ireland	OEL (15 min ref) (ppm)	1000 ppm
Latvia	OEL TWA (mg/m³)	1920 mg/m³
Latvia	OEL TWA (ppm)	1000 ppm
Netherlands	Grenswaarde TGG 8H (mg/m³)	950 mg/m³
Netherlands	Grenswaarde TGG 15MIN (mg/m³)	1500 mg/m³
Poland	NDS (mg/m³)	1000 mg/m³
Spain	VLA-ED (mg/m³)	1920 mg/m³
Spain	VLA-ED (ppm)	1000 ppm
Sweden	nivågränsvärde (NVG) (mg/m³)	950 mg/m³
Sweden	nivågränsvärde (NVG) (ppm)	500 ppm
Sweden	kortidsvärde (KTV) (mg/m³)	1500 mg/m³
Sweden	kortidsvärde (KTV) (ppm)	800 ppm
United Kingdom	WEL TWA (mg/m³)	400 mg/m³
United Kingdom	WEL TWA (ppm)	766 ppm
United Kingdom	WEL STEL (mg/m³)	958 mg/m³
United Kingdom	WEL STEL (ppm)	500 ppm
Switzerland	MAK (mg/m³)	1910 mg/m³
Switzerland	MAK (ppm)	1000 ppm
Australia	TWA (mg/m³)	760 mg/m³
Australia	TWA (ppm)	400 ppm
Australia	STEL (mg/m³)	950 mg/m³
Australia	STEL (ppm)	500 ppm
USA - ACGIH	ACGIH TWA (mg/m³)	1920 mg/m³
USA - ACGIH	ACGIH TWA (ppm)	1000 ppm

propane (74-98-6)		
Austria	MAK (mg/m³)	1800 mg/m³
Austria	MAK (ppm)	1000 ppm
Austria	MAK Short time value (mg/m³)	3600 mg/m³
Austria	MAK Short time value (ppm)	2000 ppm
Belgium	Limit value (ppm)	1000 ppm
Denmark	Grænseværdie (langvarig) (mg/m³)	3600 mg/m³
Denmark	Grænseværdie (langvarig) (ppm)	2000 ppm
Denmark	Grænseværdie (kortvarig) (mg/m³)	1800 mg/m³
Denmark	Grænseværdie (kortvarig) (ppm)	1000 ppm
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	1000 mg/m³

propane (74-98-6)		
Germany	TRGS 900 Occupational exposure limit value (ppm)	1800 ppm
Germany	TRGS 900 Limitation of exposure peaks (mg/m³)	7200 mg/m³
Germany	TRGS 900 Limitation of exposure peaks (ppm)	4000 ppm
Poland	NDS (mg/m³)	1800 mg/m³
Spain	VLA-ED (ppm)	1000 ppm
Switzerland	MAK (mg/m³)	1800 mg/m³
Switzerland	MAK (ppm)	1000 ppm
Switzerland	KZGW (mg/m³)	7200 mg/m³
Switzerland	KZGW (ppm)	4000 ppm
Canada (Quebec)	VECD (mg/m³)	1800 mg/m³
Canada (Quebec)	VECD (ppm)	1000 ppm
USA - NIOSH	NIOSH REL (TWA) (mg/m³)	1800 mg/m³
USA - NIOSH	NIOSH REL (TWA) (ppm)	1000 ppm
USA - OSHA	OSHA PEL (TWA) (mg/m³)	1800 mg/m³
USA - OSHA	OSHA PEL (TWA) (ppm)	1000 ppm

1.

8.2. Exposure controls

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal protective equipment:

Face shield.

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. Gloves must be replaced after each use and whenever signs of wear or perforation appear

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

Eye protection:

Type	Use	Characteristics	Standard
Face shield	Droplet		EN 166, EN 167, EN 168

Skin and body protection:

Type	Standard
Wear anti-static discharges clothing and shoes. Foresee ground with earth	EN 1149-1, EN 1149-2, EN 1149-3, EN 13034, EN ISO 13982-1, EN ISO 6529, EN ISO 6530, EN 464

Respiratory protection:

Device	Filter type	Condition	Standard
Gas mask	Gas filters, Particle filter		EN 149, EN 405

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Aerosol

Molecular mass : 182,2 g/mol

Colour	: No data available
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: -12 °C Aerosol propellant
Flash point	: -83 °C Aerosol propellant
Auto-ignition temperature	: 460 °C Aerosol propellant
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: < 300 kPa
Relative vapour density at 20 °C	: No data available
Relative density	: 1,1
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

VOC content : 11,28 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat. Direct sunlight.

10.5. Incompatible materials

Strong acids, strong bases and oxidation agents.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO2). Organic compounds.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Additional information	: Danger of serious damage to health by prolonged exposure through inhalation

4,4'-methylenediphenyl diisocyanate, isomers and homologues (9016-87-9)	
LD50 oral rat	> 10000 mg/kg
LD50 dermal rabbit	> 9400 mg/kg
LC50 inhalation rat (mg/l)	11 mg/l/4h

TCPP_Tris(2-chloro-1-methylethyl) phosphate_multiconstituent substance	
LD50 oral rat	632 mg/kg

Polymer with 2-Butyne-1,4-Diol and (Chloromethyl-)Oxirane, Brominated, Dehydrochlorinated, Methoxylated (86675-46-9)	
LD50 oral rat	915 mg/kg
LC50 inhalation rat (mg/l)	> 4870 mg/m³

1,1-difluoroethane (75-37-6)	
LD50 oral rat	> 1500 mg/kg
LC50 inhalation rat (ppm)	437500 ppm/4h

isobutane (75-28-5)	
LC50 inhalation rat (mg/l)	> 10 mg/l
LC50 inhalation rat (ppm)	570000 ppm IUCLID

dimethyl ether (115-10-6)	
LD50 oral	> 2000 mg/kg
LD50 dermal	> 2000 mg/kg
LC50 inhalation rat (mg/l)	308,5 mg/l

triethyl phosphate (78-40-0)	
LD50 oral rat	1131 - 1600 mg/kg
LD50 dermal rabbit	> 20000 mg/kg
LC50 inhalation rat (Dust/Mist - mg/l/4h)	> 8817 mg/l/4h (OECD 403 method)

propane (74-98-6)	
LC50 inhalation rat (mg/l)	658 mg/l

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Suspected of causing cancer.

Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory irritation.

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

Aspiration hazard : Not classified

Parafoam FR NBS	
Vaporizer	Aerosol

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Not classified

4,4'-methylenediphenyl diisocyanate, isomers and homologues (9016-87-9)	
LC50 fish 1	96h ≥ 1000 mg/l (OECD 203 method)
EC50 Daphnia 1	24h ≥ 1000 mg/l (OECD 202 method)
EC50 other aquatic organisms 2	3h ≥ 100 mg/l Bacteria
ErC50 (algae)	72h 1640 mg/l (OECD 201 method)
NOEC (chronic)	112d ≥ 10000 mg/l Daphnia magna (Big water flea)
NOEC chronic fish	112d > 10000 mg/l
NOEC chronic crustacea	21d > 10 mg/l Daphnia magna (Big water flea)
NOEC chronic algae	112d > 10000 mg/l

Polymer with 2-Butyne-1,4-Diol and (Chloromethyl-)Oxirane, Brominated, Dehydrochlorinated, Methoxylated (86675-46-9)	
LC50 fish 1	> 1000 mg/l (OECD 203 method)
EC50 Daphnia 1	> 1000 mg/l (OECD 202 method)
EC50 72h algae (1)	> 1000 mg/l (OECD 201 method)

1,1-difluoroethane (75-37-6)	
LC50 fish 1	719,6 mg/l
EC50 Daphnia 1	364,06 mg/l
EC50 72h algae (1)	168,276 mg/l

dimethyl ether (115-10-6)	
NOEC (acute)	48 h ≥ 4000 mg/l Daphnia Magna
NOEC (chronic)	96 h ≥ 4000 mg/l Poecilia reticulate

triethyl phosphate (78-40-0)	
LC50 fish 1	> 100 mg/l (OECD 203 method)
EC50 Daphnia 1	> 100 mg/l
EC50 other aquatic organisms 1	900 mg/l
EC50 other aquatic organisms 2	> 2985 mg/l
NOEC chronic crustacea	31,6 mg/l (OECD 211 method)

12.2. Persistence and degradability

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.

triethyl phosphate (78-40-0)	
Persistence and degradability	Not readily biodegradable.

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

12.3. Bioaccumulative potential

4,4'-methylenediphenyl diisocyanate, isomers and homologues (9016-87-9)	
Bioconcentration factor (BCF REACH)	200
Bioaccumulative potential	highly bioaccumulative.

Polymer with 2-Butyne-1,4-Diol and (Chloromethyl-)Oxirane, Brominated, Dehydrochlorinated, Methoxylated (86675-46-9)	
Log Pow	0 - 3

1,1-difluoroethane (75-37-6)	
Log Pow	0,75

isobutane (75-28-5)	
Bioconcentration factor (BCF REACH)	27
Log Pow	2,76
Bioaccumulative potential	Low bioaccumulation potential.

triethyl phosphate (78-40-0)	
Bioconcentration factor (BCF REACH)	< 1,3
Log Pow	1,11
Bioaccumulative potential	Low bioaccumulation potential.

propane (74-98-6)	
Bioconcentration factor (BCF REACH)	13
Log Pow	2,86
Bioaccumulative potential	Low bioaccumulation potential.

12.4. Mobility in soil

Polymer with 2-Butyne-1,4-Diol and (Chloromethyl-)Oxirane, Brominated, Dehydrochlorinated, Methoxylated (86675-46-9)	
Surface tension	49,7 mN/m

isobutane (75-28-5)	
Log Koc	35
Ecology - soil	Very mobile.

dimethyl ether (115-10-6)	
Surface tension	0,001136 N/m

propane (74-98-6)	
Log Koc	460 7.02E-3 N/m (25°C)
Ecology - soil	medium.

12.5. Results of PBT and vPvB assessment

Parafoam FR NBS
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste treatment methods : Handle uncleaned empty containers as full ones.

European List of Waste (LoW) code : 16 05 04* - gases in pressure containers (including halons) containing dangerous substances

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.
HP4 - “Irritant — skin irritation and eye damage:” waste which on application can cause skin irritation or damage to the eye.
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.
HP13 - “Sensitising:” waste which contains one or more substances known to cause sensitising effects to the skin or the respiratory organs.
HP7 - “Carcinogenic:” waste which induces cancer or increases its incidence

SECTION 14: Transport information

In accordance with ADR

ADR

14.1. UN number

1950

14.2. UN proper shipping name

AEROSOLS

UN 1950 AEROSOLS, 2.1, (D)

14.3. Transport hazard class(es)

2.1

14.4. Packing group

Not applicable

ADR
14.5. Environmental hazards
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)	: 1l
Excepted quantities (ADR)	: E0
Packing instructions (ADR)	: P207
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

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:	
3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	4,4'-methylenediphenyl diisocyanate, isomers and homologues ; triethyl phosphate ; TCPP_Tris(2-chloro-1-methylethyl) phosphate_multiconstituent substance
3(b) 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	4,4'-methylenediphenyl diisocyanate, isomers and homologues ; triethyl phosphate ; Polymer with 2-Butyne-1,4-Diol and (Chloromethyl-)Oxirane, Brominated, Dehydrochlorinated, Methoxylated ; TCPP_Tris(2-chloro-1-methylethyl) phosphate_multiconstituent substance
40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.	isobutane ; propane ; dimethyl ether

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC content : 11,28 %

15.1.2. National regulations

Germany

Reference to AwSV : Water hazard class (WGK) 3, Highly hazardous to water (Classification according to AwSV, Annex 1)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen	: None of the components are listed
SZW-lijst van mutagene stoffen	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	: None of the components are listed

Denmark

Class for fire hazard	: Class I-1
Store unit	: 1 liter
Classification remarks	: F+ <Aerosol 1>; Emergency management guidelines for the storage of flammable liquids must be followed
Recommendations Danish Regulation	: Young people below the age of 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with the product Persons suffering from asthma or eczema and persons who have chronic lung diseases, skin or respiratory allergies to isocyanates should not work with the material The requirements from the Danish Working Environment Authorities regarding work with epoxy resins and isocyanates must be observed during use and disposal The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier

For the following substances of this mixture a chemical safety assessment has been carried out
triethyl phosphate

SECTION 16: Other information

Full text of H- and EUH-statements:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aerosol 1	Aerosol, Category 1
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Gas 1	Flammable gases, Category 1
Press. Gas (Comp.)	Gases under pressure : Compressed gas
Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.

H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
EUH204	Contains isocyanates. May produce an allergic reaction.

MSDS Reach Annex II DL-Chem

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.