Ceramic Spray

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Issue date: 7/10/2014 Revision date: 1/6/2023 Supersedes version of: 4/16/2018 Version: 2.0

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

1.1. Product identifier

Product form : Mixture
Product name : Ceramic Spray
UFI : D7VT-16EQ-K00C-6CVQ
Product code : 76504
Article number : 76504

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

1.2.1. Relevant identified uses

Function or use category : Lubricants, Greases and Release Products

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

BARDAHL NL - OCD NEDERLAND BV
Maxwellstraat 41
3316 GP Dordrecht
Nederland
T 0031 78 651 2322 - F 0031 78 617 4848
mjkooijman@bardahl.nl - www.bardahl.nl

1.4. Emergency telephone number

Emergency number : +31 (0) 6 54924171
During office hours: 8.30 t/m 17:00 h

Country	Official advisory body	Address	Emergency number	Comment
	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	0870 243 2241	
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)	
Israel	Israel Poison Information Center Rambam Health Care Campus	6 Ha'Aliya Street 31096 Haifa	+972 4 854 1900	
Malta	Medicines & Poisons Info Office	Mater Dei Hospital MSD 2090 Msida	+356 2545 6508	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA Belfast	0344 892 0111	Only for healthcare professionals

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
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336
Aspiration hazard, Category 1	H304
Hazardous to the aquatic environment – Chronic Hazard, Category 2	H411

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 GHS09

Signal word (CLP) : Danger

Contains : pentane, Hydrocarbons, C7, n-alkanes, isoalkanes, cycloalkanes, Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics,<5% n-hexane

Hazard statements (CLP) :
H222 - Extremely flammable aerosol.
H229 - Pressurised container: May burst if heated.
H315 - Causes skin irritation.
H336 - May cause drowsiness or dizziness.
H411 - 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.
P501 - Dispose of contents and container to an approved waste disposal plant.
P211 - Do not spray on an open flame or other ignition source.
P251 - Pressurized container: Do not pierce or burn, even after use.
P261 - Avoid breathing dust.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves.
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
P391 - Collect spillage.
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Extra phrases : This product requires child resistant fastenings when supplied to the general public unless the product is placed on the market in the form of aerosols or in a container with a sealed spray attachment.
Without adequate ventilation formation of explosive mixtures is possible.
Toxic to aquatic organisms.

2.3. Other hazards

Other hazards which do not result in classification : Without adequate ventilation formation of explosive mixtures is possible.

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH 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]
pentane (Note C)	CAS-No.: 109-66-0 EC-No.: 203-692-4 EC Index-No.: 601-006-00-1 REACH-no: 01-2119459286-30	10 – 20	Flam. Liq. 2, H225 Asp. Tox. 1, H304 STOT SE 3, H336 Aquatic Chronic 2, H411
butane (Note C)	CAS-No.: 106-97-8 EC-No.: 203-448-7 EC Index-No.: 601-004-00-0 REACH-no: 01-2119474691-32	10 – 20	Flam. Gas 1A, H220 Press. Gas
Hydrocarbons, C7, n-alkanes, isoalkanes, cycloalkanes	EC-No.: 927-510-4 REACH-no: 01-2119475515-33	5 – 10	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics,<5% n-hexane	EC-No.: 921-024-6 REACH-no: 01-2119475514-35	5 – 10	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
isobutane (Note C)	CAS-No.: 75-28-5 EC-No.: 200-857-2 EC Index-No.: 601-004-00-0 REACH-no: 01-2119485395-27	5 – 10	Flam. Gas 1A, H220 Press. Gas

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.
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 possible, show the doctor this safety data sheet. Failing this, show the doctor the packaging or label. Seek medical attention immediately.

First-aid measures after inhalation : Allow affected person to breathe fresh air. Harmful: may cause lung damage if swallowed. If not breathing, give artificial respiration. Call a physician immediately. Avoid contact with skin. Use protection when providing mouth-to-mouth resuscitation. If breathing is difficult, give oxygen. Observation of lung oedema and pneumonia.

First-aid measures after skin contact : Wash skin thoroughly with mild soap and water. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse thoroughly and plentifully with water, also under the eyelids. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Do NOT induce vomiting. Get immediate medical advice and attention. Never give anything by mouth to an unconscious person. Potential for aspiration if swallowed. If vomiting occurs spontaneously, keep head below the hips to prevent aspiration. Obtain emergency medical attention.

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

Symptoms/effects : Shortness of breath, headaches, intoxication, dizziness, cough and nausea.

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

IF SWALLOWED : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor. Specific treatment. Doctor: gastric lavage is not recommended.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	:	Dry chemical. Carbon dioxide. Water spray.
Unsuitable extinguishing media	:	Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

5.2. Special hazards arising from the substance or mixture

Fire hazard	:	Risk of ignition. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Explosion hazard	:	Pressurised container: May burst if heated.
Hazardous decomposition products in case of fire	:	Carbon monoxide. Carbon dioxide.

5.3. Advice for firefighters

Firefighting instructions	:	Use water spray or fog for cooling exposed containers. Prevent fire fighting water from entering the environment.
Protection during firefighting	:	Wear a self contained breathing apparatus. Wear recommended personal protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	:	Keep away from sources of ignition - No smoking. Avoid contact with skin and eyes. Ventilate area. Use special care to avoid static electric charges. Do not breathe gas/fumes/vapour/spray.

6.1.1. For non-emergency personnel

Emergency procedures	:	Keep public away from danger area.

6.1.2. For emergency responders

Protective equipment	:	Wear proper protective equipment.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Stop leak without risks if possible. Clean contaminated surfaces with an excess of water.

6.3. Methods and material for containment and cleaning up

For containment	:	Stop leak without risks if possible. Dam up the solid spill.
Methods for cleaning up	:	Ventilate area. Clean contaminated surfaces with an excess of water. Use containment booms and remove from the surface by skimming or with suitable absorbents if the flashpoint exceeds ambient temperature.
Other information	:	Take precautionary measures against static discharge. Collect all waste in suitable and labelled containers and dispose according to local legislation.

6.4. Reference to other sections

(See section 7: Handling and Storage). For further information refer to section 8: "Exposure controls/personal protection". For disposal of solid materials or residues refer to section 13 : "Disposal considerations".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Good ventilation of the workplace required. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Container under pressure. Do not drill or burn even after use. Do not expose to temperatures exceeding 50 °C/ 122 °F. Do not spray on an open flame or other ignition source. Wear personal protective equipment. Use only non-sparking tools. Ensure adequate ventilation, especially in confined areas. Gas cabinets, rooms or indoor areas where product is stored or used shall be protected by an automatic sprinkler system. Do not breathe gas, fumes, vapour or spray. Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product. Wash clothing before re-using. Wear suitable respiratory equipment in case of insufficient ventilation. Wear protective gloves, eye protection, face protection.

Hygiene measures : Do not eat, drink or smoke when using this product. Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Wash hands before breaks and after work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry, cool place. No contact with flammable substances. Gas cabinets, rooms or indoor areas where product is stored or used shall be protected by an automatic sprinkler system. Store in accordance with local, regional, national or international regulation. Store locked up. Keep out of reach of children. Store away from other materials. Keep in original containers. Keep container tightly closed.

Incompatible materials : heat. Direct sunlight. Open flame. sparks. Sources of ignition.

Special rules on packaging : Keep only in original container.

7.3. Specific end use(s)

This information is provided in the present safety data sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

pentane (109-66-0)	
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	1800 mg/m³ (Long term value)
MAK (OEL TWA) [ppm]	600 ppm (Long term value)

butane (106-97-8)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	1000
IOEL TWA [ppm]	1000 ppm
France - Occupational Exposure Limits	
VME (OEL TWA)	1900
VME (OEL TWA) [ppm]	800 ppm

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics,<5% n-hexane	
Austria - Occupational Exposure Limits	
MAK (OEL STEL)	1200 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

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection			
Type	**Field of application**	**Characteristics**	**Standard**
Safety goggles, With side shields			EN 166

8.2.2.2. Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection					
Type	**Material**	**Permeation**	**Thickness (mm)**	**Penetration**	**Standard**
Safety gloves	Butyl rubber, Nitrile rubber (NBR)	6 (> 480 minutes)	>0.7		EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection			
Device	**Filter type**	**Condition**	**Standard**
In case of insufficient ventilation, wear suitable respiratory equipment	Type A		EN 140, EN 14387

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Other information:
Do not breathe gas, fumes, vapour or spray. Ensure adequate ventilation, especially in confined areas.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Aerosol.

Colour	:	Grey.
Odour	:	aromatic.
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	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	> 200 °C
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapour pressure	:	No data available
Relative vapour density at 20°C	:	No data available
Relative density	:	No data available
Solubility	:	Practically not miscible.
Partition coefficient n-octanol/water (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	:	493.8 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Pressurised container: May burst if heated.

10.4. Conditions to avoid

Heat. Sparks. Open flame. Sources of ignition. Extremely high or low temperatures. Direct sunlight.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizers. Oxidizer.

10.6. Hazardous decomposition products

None under normal conditions.

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 : Deliberate misuse by deliberately concentrating and inhaling the contents is possible be harmful or fatal. Specific test data for the substance or mixture are not available available. Aspiration into the lungs can cause serious lung damage. Can cause pulmonary edema. Pulmonary edema can be fatal. May irritate the cause respiratory problems. May cause drowsiness or dizziness.
Specific test data for the substance or mixture are not available. Chance on inhalation if swallowed. May cause lung damage if swallowed. Aspiration can cause pulmonary edema and pneumonia. May be fatal if swallowed enters the airways. Ingestion may cause gastrointestinal irritation, cause nausea, vomiting and diarrhoea.
Breathing difficulties. Coughing and/or wheezing. Dizziness.
Redness. May cause redness and tearing of the eyes. Inhalation of high vapor concentrations can cause symptoms such as headache, dizziness, fatigue, nausea and vomiting.

pentane (109-66-0)	
LD50 oral rat	> 2000 mg/kg
LC50 Inhalation - Rat	5 mg/l/4h

Hydrocarbons, C7, n-alkanes, isoalkanes, cycloalkanes	
LD50 oral rat	> 5840 mg/kg
LD50 dermal rat	> 2920 mg/kg
LC50 Inhalation - Rat	> 23300 mg/l/4h

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics,<5% n-hexane	
LD50 oral rat	> 5840 mg/kg
LD50 dermal rat	> 2920 mg/kg
LC50 Inhalation - Rat	< 25.2 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : May cause drowsiness or dizziness.

pentane (109-66-0)	
STOT-single exposure	May cause drowsiness or dizziness.

Hydrocarbons, C7, n-alkanes, isoalkanes, cycloalkanes	
STOT-single exposure	May cause drowsiness or dizziness.

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics,<5% n-hexane	
STOT-single exposure	May cause drowsiness or dizziness.

STOT-repeated exposure : Not classified
Aspiration hazard : May be fatal if swallowed and enters airways.

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) : Toxic to aquatic life with long lasting effects.

pentane (109-66-0)	
LC50 - Other aquatic organisms [1]	4.26 mg/l (Oncorhynchus mykiss 96h))
EC50 - Crustacea [1]	2.7 mg/l
EC50 - Other aquatic organisms [1]	10.7 mg/l (Pseudokirchneriella subcaptita)
NOEC (acute)	7.51 mg/l (Pseudokirchneriella subcaptita)

Hydrocarbons, C7, n-alkanes, isoalkanes, cycloalkanes	
EC50 - Crustacea [1]	3 mg/l

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics,<5% n-hexane	
LC50 - Other aquatic organisms [1]	11.4 mg/l
EC50 - Crustacea [1]	3 mg/l
EC50 72h - Algae [1]	30 – 100 mg/l
LOEC (chronic)	0.32 mg/l
NOEC (chronic)	0.17 mg/l

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Prevent entry to sewers and public waters. Dispose in a safe manner in accordance with local/national regulations.

Additional information : Do not pierce or burn, even after use.

European List of Waste (LoW) code : 15 01 04 - metallic packaging
16 05 04* - gases in pressure containers (including halons) containing dangerous substances

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
UN 1950	UN 1950	UN 1950	UN 1950	UN 1950

ADR	IMDG	IATA	ADN	RID
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
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
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
Limited quantities (IMDG)	:	SP277
Excepted quantities (IMDG)	:	E0
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. 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

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)	
Reference code	**Applicable on**
3.	Ceramic Spray
28.	Ceramic Spray
29.	Ceramic Spray
30.	Ceramic Spray
40.	Ceramic Spray

REACH Annex XIV (Authorisation List)

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

REACH Candidate List (SVHC)

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

PIC Regulation (Prior Informed Consent)

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

POP Regulation (Persistent Organic Pollutants)

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

Ozone Regulation (1005/2009)

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

VOC Directive (2004/42)

VOC content : 493.8 g/l

Explosives Precursors Regulation (2019/1148)

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

Drug Precursors Regulation (273/2004)

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

15.1.2. National regulations

France

Occupational diseases	
Code	Description
RG 84	Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide

Germany

Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1).
Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

ABM category : Z(2) - biodegradable substances with hazardous properties for humans and the environment (carcinogenicity/ mutagenicity/reprotoxicity/bioacumulative potential or toxicity)
SZW-lijst van kankerverwekkende stoffen : None of the components are listed
SZW-lijst van mutagene stoffen : None of the components are listed
SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed
SZW-lijst van reprotoxische stoffen – Ontwikkeling : None of the components are listed

Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

Switzerland

Storage class (LK) : LK 2 - Liquefied or pressurized gases

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
	Seveso Additional information	Added	
	Number of blue cones/lights (ADN)	Added	
	Ventilation (ADN)	Added	

Indication of changes			
Section	**Changed item**	**Change**	**Comments**
	Equipment required (ADN)	Added	
	Excepted quantities (ADN)	Added	
	Limited quantities (ADN)	Added	
	Danger labels (ADN)	Added	
	Classification code (ADN)	Added	
	Proper Shipping Name (RID)	Added	
	Hazard identification number (RID)	Added	
	Colis express (express parcels) (RID)	Added	
	Special provisions for carriage - Loading, unloading and handling (RID)	Added	
	Special provisions for carriage – Packages (RID)	Added	
	Transport category (RID)	Added	
	Mixed packing provisions (RID)	Added	
	Special packing provisions (RID)	Added	
	Packing instructions (RID)	Added	
	Excepted quantities (RID)	Added	
	Limited quantities (RID)	Added	
	Special provisions (RID)	Added	
	Classification code (RID)	Added	
	Segregation (IMDG)	Added	
	Stowage and handling (IMDG)	Added	
	UN-No. (RID)	Added	
	Special provisions (IATA)	Modified	
	Packing instructions (ADR)	Modified	
	Special provisions (IMDG)	Modified	
2.2	Precautionary statements (CLP)	Modified	
2.2	Extra phrases	Added	
3	Composition/information on ingredients	Modified	
4.1	First-aid measures after ingestion	Modified	
4.1	First-aid measures after skin contact	Modified	
4.1	First-aid measures after eye contact	Modified	
4.1	First-aid measures after inhalation	Modified	
4.1	First-aid measures general	Added	
4.2	Symptoms/effects	Modified	
4.3	Other medical advice or treatment	Added	
5.1	Unsuitable extinguishing media	Modified	
5.1	Suitable extinguishing media	Modified	

Indication of changes			
Section	**Changed item**	**Change**	**Comments**
5.2	Hazardous decomposition products in case of fire	Added	
5.2	Fire hazard	Modified	
5.2	Explosion hazard	Modified	
5.3	Protection during firefighting	Modified	
6.1	General measures	Modified	
6.2	Environmental precautions	Modified	
6.3	For containment	Added	
6.3	Other information	Added	
6.3	Methods for cleaning up	Modified	
6.4	Reference to other sections (8, 13)	Modified	
7.1	Hygiene measures	Added	
7.1	Precautions for safe handling	Modified	
7.2	Special rules on packaging	Added	
7.2	Incompatible materials	Modified	
7.2	Storage conditions	Modified	
7.3	Specific end uses	Added	
8.2	Other information	Modified	
9.1	Odour	Modified	
9.1	Colour	Modified	
10.2	Chemical stability	Modified	
10.3	Possibility of hazardous reactions	Modified	
10.4	Conditions to avoid	Added	
10.5	Incompatible materials	Added	
10.6	Hazardous decomposition products	Modified	
11.1	Additional information	Added	
11.1	Additional information	Added	
11.1	Additional information	Added	
11.1	Additional information	Added	
13.1	Additional information	Added	
14.1	UN-No. (ADN)	Added	
14.2	Proper Shipping Name (ADN)	Added	
14.3	Danger labels (RID)	Added	
14.6	Special provisions (ADN)	Added	
14.6	Packing instructions (IMDG)	Modified	
15.2	Chemical safety assessment	Modified	

Abbreviations and acronyms:	
	Abbreviations and acronyms: RID: Regulations Concerning the International Transport of Dangerous Goods by Rail ICAO: International Civil Aviation Organization ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonized System of Classification and labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent

Full text of H- and EUH-statements:	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Flam. Gas 1A	Flammable gases, Category 1A
Flam. Liq. 2	Flammable liquids, Category 2
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
Press. Gas	Gases under pressure
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis

Safety Data Sheet (SDS), EU

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.