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

1.1 Product identifier

Trade name : Colorspray E-6 Natur (EV1), 150 ml (farblos (C0))

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

Use of the Substance/Mixture : Paint-aerosol

1.3 Details of the supplier of the safety data sheet

Company	:	hebro chemie- ZN der Rockwood Specialties Group GmbH Rostocker Str. 40 41199 Mönchengladbach
Contact person	:	Zentrale hebro chemie
Telephone	:	+49 (0) 2166 6009-0
Telefax	:	+49 (0) 2166 6009-99
Contact person product safety		Abteilung Produktsicherheit
Telephone	:	+49(0)2166 6009-311
E-mail address	:	msds.de@hebro-chemie.de

1.4 Emergency telephone number

: Giftinformationszentrum Erfurt:
+49 (0) 361 730 730

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Aerosols, Category 1	H222: Extremely flammable aerosol. H229: Pressurised container: May burst if heated.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Specific target organ toxicity - single exposure, Category 3, Central nervous system	H336: May cause drowsiness or dizziness.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

Signal word : Danger

Hazard statements :

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Supplemental Hazard Statements : EUH066 Repeated exposure may cause skin dryness or cracking.

Precautionary statements :

Prevention:

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.
P261	Avoid breathing mist.
P280	Wear eye protection/ face protection.

Storage:

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

Hazardous components which must be listed on the label:

Acetone
n-Butyl acetate
2-Methoxy-1-methylethyl acetate

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: This substance/mixture does not contain components considered to have endocrine disrupting properties for environment according to UK REACH Article 57(f).

Toxicological information: This substance/mixture does not contain components considered to have endocrine disrupting properties for human health according to UK REACH Article 57(f),

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Mixture

Components

Chemical name	CAS-No. EC-No.	Classification	Concentration (% w/w)

	Index-No. Registration number		
Acetone	67-64-1 200-662-2 606-001-00-8 01-2119471330-49	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 (Central nervous system) EUH066	>= 25 - < 50
n-Butyl acetate	123-86-4 204-658-1 607-025-00-1 01-2119485493-29	Flam. Liq. 3; H226 STOT SE 3; H336 (Central nervous system) EUH066	>= 10 - < 20
2-Methoxy-1-methylethyl acetate	108-65-6 203-603-9 01-2119475791-29	Flam. Liq. 3; H226 STOT SE 3; H336 (Central nervous system)	>= 2.5 - < 10
Xylene	1330-20-7 01-2119488216-32	Flam. Liq. 3; H226 Acute Tox. 4; H332 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 (Respiratory system) STOT RE 2; H373 Asp. Tox. 1; H304 Aquatic Chronic 3; H412	>= 1 - < 2.5
Ethanol	64-17-5 200-578-6 01-2119457610-43	Flam. Liq. 2; H225 Eye Irrit. 2; H319	>= 1 - < 2.5
Substances with a workplace exposure limit :			
dimethyl ether	115-10-6 204-065-8 603-019-00-8 01-2119472128-37	Flam. Gas 1; H220 Press. Gas Liquefied gas; H280	>= 10 - < 25
Butane	106-97-8 203-448-7 601-004-00-0 01-2119474691-32	Flam. Gas 1; H220 Press. Gas	>= 2.5 - < 10

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : If symptoms persist, call a physician.

If inhaled : Provide fresh air.

In case of skin contact : Take off immediately all contaminated clothing.
Wash skin thoroughly with soap and water or use recognized

skin cleanser.

In case of eye contact	:	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
If swallowed	:	Unlikely route of exposure

4.2 Most important symptoms and effects, both acute and delayed

Risks	:	Causes serious eye irritation. May cause drowsiness or dizziness. Repeated exposure may cause skin dryness or cracking.

4.3 Indication of any immediate medical attention and special treatment needed

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	:	Dry powder Carbon dioxide (CO2) Alcohol-resistant foam Water spray jet
Unsuitable extinguishing media	:	High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting	:	Combustion may cause: Risk of explosion.
Hazardous combustion products	:	Carbon oxides

5.3 Advice for firefighters

Special protective equipment for firefighters	:	Wear self-contained breathing apparatus for firefighting if necessary.
Specific extinguishing methods	:	Use water spray to cool unopened containers.
Further information	:	Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Evacuate personnel to safe areas.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	:	Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. Do not breathe vapour.

Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions : No special environmental precautions required.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

Refer to protective measures listed in sections 7 and 8., For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Do not breathe vapours or spray mist.
Do not spray on a naked flame or any incandescent material.
Keep away from sources of ignition - No smoking. Keep away from children.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.
For personal protection see section 8.

Advice on protection against fire and explosion : Take measures to prevent the build up of electrostatic charge.
Vapours may form explosive mixtures with air.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Electrical installations / working materials must comply with the technological safety standards.

Further information on storage conditions : Keep only in the original container in a cool, well-ventilated place. Keep away from heat. Keep away from sources of ignition - No smoking.

Advice on common storage : Do not store together with explosives, oxidizing agents, organic peroxides and infectious products.

7.3 Specific end use(s)

Specific use(s) : Paint-aerosol

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Acetone	67-64-1	TWA	500 ppm	GB EH40

			1,210 mg/m3	
		STEL	1,500 ppm 3,620 mg/m3	GB EH40
		TWA	500 ppm 1,210 mg/m3	GB EH40
		STEL	1,500 ppm 3,620 mg/m3	GB EH40
dimethyl ether	115-10-6	TWA	400 ppm 766 mg/m3	GB EH40
		STEL	500 ppm 958 mg/m3	GB EH40
n-Butyl acetate	123-86-4	TWA	150 ppm 724 mg/m3	GB EH40
		STEL	200 ppm 966 mg/m3	GB EH40
Butane	106-97-8	TWA	600 ppm 1,450 mg/m3	GB EH40
	Further information: Capable of causing cancer and/or heritable genetic damage., Carcinogenic only applies if butane contains more than 0.1% of buta-1,3-diene			
		STEL	750 ppm 1,810 mg/m3	GB EH40
	Further information: Capable of causing cancer and/or heritable genetic damage., Carcinogenic only applies if butane contains more than 0.1% of buta-1,3-diene			
		STEL	750 ppm 1,810 mg/m3	GB EH40
	Further information: Capable of causing cancer and/or heritable genetic damage., Carcinogenic only applies if butane contains more than 0.1% of buta-1,3-diene			
		TWA	600 ppm 1,450 mg/m3	GB EH40
	Further information: Capable of causing cancer and/or heritable genetic damage., Carcinogenic only applies if butane contains more than 0.1% of buta-1,3-diene			
		TWA	600 ppm 1,450 mg/m3	GB EH40
	Further information: Capable of causing cancer and/or heritable genetic damage.			
		STEL	750 ppm 1,810 mg/m3	GB EH40
	Further information: Capable of causing cancer and/or heritable genetic damage.			
		TWA	600 ppm 1,450 mg/m3	GB EH40
	Further information: Capable of causing cancer and/or heritable genetic damage.			
		STEL	750 ppm 1,810 mg/m3	GB EH40
	Further information: Capable of causing cancer and/or heritable genetic damage.			
2-Methoxy-1-methylethyl acetate	108-65-6	TWA	50 ppm 274 mg/m3	GB EH40

	Further information: Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
		STEL	100 ppm 548 mg/m3	GB EH40
	Further information: Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
Xylene	1330-20-7	TWA	50 ppm 220 mg/m3	GB EH40
	Further information: Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
		STEL	100 ppm 441 mg/m3	GB EH40
	Further information: Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
Ethanol	64-17-5	TWA	1,000 ppm 1,920 mg/m3	GB EH40
		TWA	1,000 ppm 1,920 mg/m3	GB EH40

Biological occupational exposure limits

Substance name	CAS-No.	Control parameters	Sampling time	Basis
Xylene	1330-20-7	methyl hippuric acid: 650 Millimoles per mole creatinine (Urine)	After shift	GB EH40 BAT

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006

Substance name	End Use	Exposure routes	Potential health effects	Value
Acetone	Workers	Inhalation	Long-term systemic effects	1210 mg/m3
	Workers	Inhalation	Long-term local effects	2420 mg/m3
	Workers	Inhalation	Acute systemic effects	1210 mg/m3
	Workers	Skin contact	Long-term systemic effects	186 mg/kg bw/day
dimethyl ether	Workers	Inhalation	Long-term systemic effects	1894 mg/m3
n-Butyl acetate	Workers	Inhalation	Long-term systemic effects	480 mg/m3
	Workers	Inhalation	Long-term local effects	480 mg/m3
2-Methoxy-1-methylethyl acetate	Workers	Inhalation	Long-term systemic effects	275 mg/m3
	Workers	Skin contact	Long-term systemic effects	153.5 mg/kg bw/day
Xylene	Workers	Inhalation	Long-term systemic effects	77 mg/m3
Ethanol	Workers	Inhalation	Long-term systemic	950 mg/m3

			effects	

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006

Substance name	Environmental Compartment	Value
Acetone	Fresh water	10.6 mg/l
	Marine water	1.06 mg/l
	Sewage treatment plant	100 mg/l
	Fresh water sediment	30.04 mg/kg
	Marine sediment	3.04 mg/kg
	Soil	29.5 mg/kg
2-Methoxy-1-methylethyl acetate	Fresh water	0.635 mg/l
	Marine water	0.0635 mg/l
	Intermittent use/release	6.35 mg/l
	Sewage treatment plant	100 mg/l
	Fresh water sediment	3.29 mg/kg
	Marine sediment	0.329 mg/kg
	Soil	0.29 mg/kg

8.2 Exposure controls

Engineering measures

Provide sufficient air exchange and/or exhaust in work rooms.

Personal protective equipment

Eye/face protection : Safety glasses with side-shields conforming to EN166

Hand protection
- Material : Protective gloves complying with EN 374.
- Break through time : > 60 min
- Protective index : Class 3

- Material : Nitrile rubber
- Glove thickness : 0.4 mm

- Material : butyl-rubber
- Glove thickness : 0.5 mm

- Remarks : The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. The exact break through time can be obtained from the protective glove producer and this has to be observed.

Skin and body protection : Chemical resistant protective clothing according to DIN EN 13034 (Type 6)
Work uniform or laboratory coat.

Respiratory protection : Do not inhale aerosol.

- Filter type : Combined inorganic and acidic gas/vapour, ammonia/amines and organic vapour type (ABEK)

Protective measures : Handle in accordance with good industrial hygiene and safety practice.
When using do not eat, drink or smoke.
Wash hands before breaks and at the end of workday.

Follow the skin protection plan.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	:	aerosol
Colour	:	According to product name
Odour	:	characteristic
Melting point/freezing point	:	Not applicable
Boiling point/boiling range	:	No data available
Upper explosion limit / Upper flammability limit	:	Upper flammability limit 18.6 %(V)
Lower explosion limit / Lower flammability limit	:	Lower flammability limit 1.2 %(V)
Flash point	:	No data available
Auto-ignition temperature	:	235 °C
pH	:	No data available
Viscosity		
Viscosity, kinematic	:	Not applicable
Solubility(ies)		
Water solubility	:	immiscible to little miscible
Partition coefficient: n-octanol/water	:	Not applicable
Vapour pressure	:	8,300 hPa (20 °C)
Density	:	0.78 g/cm³ (20 °C)

Relative vapour density	:	not determined

9.2 Other information

Explosives	:	Vapours may form explosive mixture with air.
Self-ignition	:	not auto-flammable
Substances and mixtures, which in contact with water, emit flammable gases	:	Vapours may form explosive mixture with air.
Metal corrosion rate	:	Not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Hazardous reactions	:	No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid	:	No decomposition if used as directed.

10.5 Incompatible materials

Materials to avoid	:	Oxidizing agents

10.6 Hazardous decomposition products

Carbon oxides
Nitrogen oxides (NOx)
Smoke

SECTION 11: Toxicological information

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

Acute toxicity

Not classified due to lack of data.

Product:

Acute inhalation toxicity	:	Acute toxicity estimate: > 5 mg/l

Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 2,000 mg/kg
Method: Calculation method

Components:

Acetone:

Acute oral toxicity : LD50 (Rat): 5,800 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): 76 mg/l
Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rabbit): > 158,000 mg/kg

n-Butyl acetate:

Acute oral toxicity : LD50 (Rat): 13,100 mg/kg

Acute inhalation toxicity : LC50 (Rat): 21 mg/l
Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rabbit): 14,100 mg/kg

2-Methoxy-1-methylethyl acetate:

Acute oral toxicity : LD50 (Rat): > 8,532 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 23.8 mg/l
Exposure time: 6 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rat): > 5,000 mg/kg

Ethanol:

Acute oral toxicity : LD50 (Rat): 10,470 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): 124.7 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Method: OECD Test Guideline 402

Skin corrosion/irritation

Repeated exposure may cause skin dryness or cracking.

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Remarks : Causes serious eye irritation.

Respiratory or skin sensitisation

Skin sensitisation

Not classified due to lack of data.

Respiratory sensitisation

Not classified due to lack of data.

Germ cell mutagenicity

Not classified due to lack of data.

Components:

Acetone:

Genotoxicity in vitro : Test Type: Ames test
Method: OECD Test Guideline 471
Result: negative

Test Type: Ames test
Method: OECD Test Guideline 476
Result: negative

Genotoxicity in vivo : Test Type: in vivo assay
Species: Mouse
Application Route: Oral
Remarks: negative

2-Methoxy-1-methylethyl acetate:

Genotoxicity in vitro : Remarks: In vitro tests did not show mutagenic effects

Carcinogenicity

Based on available data, the classification criteria are not met.

Product:

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

Reproductive toxicity

Not classified due to lack of data.

STOT - single exposure

May cause drowsiness or dizziness.

STOT - repeated exposure

Not classified due to lack of data.

Aspiration toxicity

Not classified due to lack of data.

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : This substance/mixture does not contain components considered to have endocrine disrupting properties for human health according to UK REACH Article 57(f),

Further information

Product:

Remarks : Health injuries are not known or expected under normal use.

SECTION 12: Ecological information

12.1 Toxicity

Components:

Acetone:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 5,540 mg/l
Exposure time: 96 h
Test Type: static test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 8,800 mg/l
Exposure time: 48 h
Test Type: static test

NOEC (Daphnia magna (Water flea)): 2,212 mg/l
Exposure time: 28 d
Test Type: flow-through test

Toxicity to algae/aquatic plants : NOEC (Algae): 430 mg/l
Exposure time: 96 h
Test Type: static test

NOEC (Microcystis aeruginosa (blue-green algae)): 530 mg/l
Exposure time: 8 d
Test Type: static test

Toxicity to microorganisms : (activated sludge):
Exposure time: 30 min
Test Type: Respiration inhibition

n-Butyl acetate:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 62 mg/l
Exposure time: 96 h

LC50 (Lepomis macrochirus (Bluegill sunfish)): 100 mg/l
Exposure time: 96 h

LC50 (Pimephales promelas (fathead minnow)): 18 mg/l

Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 73 mg/l Exposure time: 24 h
Toxicity to algae/aquatic plants	:	EC50 (Desmodesmus subspicatus (green algae)): 674.7 mg/l Exposure time: 72 h
Toxicity to microorganisms	:	EC50 (Pseudomonas putida): 115 mg/l Exposure time: 16 h

2-Methoxy-1-methylethyl acetate:

Toxicity to fish	:	LC50 (Oryzias latipes (Orange-red killifish)): > 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 500 mg/l Exposure time: 48 h Method: Directive 67/548/EEC, Annex V, C.2.
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): > 1,000 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to microorganisms	:	EC20 (activated sludge): > 1,000 mg/l Exposure time: 0.5 h Method: OECD Test Guideline 209

Ethanol:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 13,000 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	LC50 (Daphnia magna (Water flea)): 12,340 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	EC50 (Algae): 275 mg/l Exposure time: 72 h Method: OECD Test Guideline 201

12.2 Persistence and degradability

Product:

Biodegradability	:	Remarks: No data available

12.3 Bioaccumulative potential

Product:

Bioaccumulation	:	Remarks: No data available

12.4 Mobility in soil

Product:

Mobility : Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment : This substance/mixture does not contain components considered to have endocrine disrupting properties for environment according to UK REACH Article 57(f).

12.7 Other adverse effects

Product:

Additional ecological information : No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Contaminated packaging : Offer empty spray cans to an established disposal company.

Waste Code : Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

SECTION 14: Transport information

14.1 UN number or ID number

ADR : UN 1950

RID : UN 1950

IMDG : UN 1950

IATA : UN 1950

14.2 UN proper shipping name

ADR : AEROSOLS

RID : AEROSOLS

IMDG : AEROSOLS

IATA : Aerosols, flammable

14.3 Transport hazard class(es)

		Class	Subsidiary risks
ADR	:	2	2.1
RID	:	2	2.1
IMDG	:	2.1	
IATA	:	2.1	

14.4 Packing group

ADR

Packing group	:	Not assigned by regulation
Classification Code	:	5F
Labels	:	2.1
Tunnel restriction code	:	(D)

RID

Packing group	:	Not assigned by regulation
Classification Code	:	5F
Hazard Identification Number	:	23
Labels	:	2.1

IMDG

Packing group	:	Not assigned by regulation
Labels	:	2.1
EmS Code	:	F-D, S-U
Remarks	:	"IMDG-Code segregation group not applicable"., Protected from sources of heat., For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS or WASTE GAS CARTRIDGES: Category C, Clear of living quarters., For AEROSOLS with a capacity <= 1L: segr. as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a cap. > 1L: segr. as for the appr. subdiv. of class 2. For WASTE AEROSOLS: segr. as for the appr. subdiv. of class 2.

IATA (Cargo)

Packing instruction (cargo aircraft)	:	203
Packing instruction (LQ)	:	Y203
Packing group	:	Not assigned by regulation
Labels	:	Flammable Gas

IATA_P (Passenger)

Packing instruction (passenger aircraft)	:	203
Packing instruction (LQ)	:	Y203
Packing group	:	Not assigned by regulation
Labels	:	Flammable Gas

14.5 Environmental hazards

ADR

Environmentally hazardous	:	no

RID

Environmentally hazardous : no

IMDG
Marine pollutant : no

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Relevant EU provisions transposed through retained EU law

UK REACH List of restrictions (Annex 17)	:	Conditions of restriction for the following entries should be considered: Number on list 28: Isobutane Number on list 29: Isobutane
UK REACH Candidate list of substances of very high concern (SVHC) for Authorisation	:	Not applicable
The Persistent Organic Pollutants Regulations (retained Regulation (EU) 2019/1021 as amended for Great Britain)	:	Not applicable
Regulation (EC) on substances that deplete the ozone layer	:	Not applicable
UK REACH List of substances subject to authorisation (Annex XIV)	:	Not applicable
GB Export and import of hazardous chemicals - Prior Informed Consent (PIC) Regulation	:	Not applicable

Other regulations:

Take note of The Management of Health and Safety at Work Regulations 1999 (requirements relating to new and expectant mothers at work contained in Regulation 16 to 18) and of the Pregnant Workers Directive 92/85/EEC.

Take note of The Management of Health and Safety at Work Regulations 1999 (requirements relating to protection of young people at work contained in Regulation 19) and of Directive 94/33/EC on the protection of young people at work.

15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance.

SECTION 16: Other information

Full text of H-Statements

H220	:	Extremely flammable gas.
H225	:	Highly flammable liquid and vapour.
H226	:	Flammable liquid and vapour.
H280	:	Contains gas under pressure; may explode if heated.
H304	:	May be fatal if swallowed and enters airways.
H312	:	Harmful in contact with skin.
H315	:	Causes skin irritation.
H319	:	Causes serious eye irritation.
H332	:	Harmful if inhaled.
H335	:	May cause respiratory irritation.
H336	:	May cause drowsiness or dizziness.
H373	:	May cause damage to organs through prolonged or repeated exposure.
H412	:	Harmful to aquatic life with long lasting effects.
EUH066	:	Repeated exposure may cause skin dryness or cracking.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Asp. Tox.	:	Aspiration hazard
Eye Irrit.	:	Eye irritation
Flam. Gas	:	Flammable gases
Flam. Liq.	:	Flammable liquids
Press. Gas	:	Gases under pressure
Skin Irrit.	:	Skin irritation
STOT RE	:	Specific target organ toxicity - repeated exposure
STOT SE	:	Specific target organ toxicity - single exposure
GB EH40	:	UK. EH40 WEL - Workplace Exposure Limits
GB EH40 BAT	:	UK. Biological monitoring guidance values
GB EH40 / TWA	:	Long-term exposure limit (8-hour TWA reference period)
GB EH40 / STEL	:	Short-term exposure limit (15-minute reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified;

NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Other information : The information provided is based on our current knowledge and experience and apply to the product as delivered. Regarding the product properties, these are not guaranteed. The delivery of this safety datasheet does not free the recipient of the product from his own responsibility to follow the relevant rules and regulations concerning this product.

The product is classified and labelled in accordance with EC directives or respective national laws.
Regional or national implementations of GHS may not implement all hazard classes and categories.
Guideline on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) : no component is listed
No PFAS are consciously added to the product concerning the restriction proposal for inclusion to REACh (Annex XVII).

Classification of the mixture:		**Classification procedure:**
Aerosol 1	H222, H229	Calculation method
Eye Irrit. 2	H319	Calculation method
STOT SE 3	H336	Calculation method

GB / EN