SAFETY DATA SHEET

In compliance with EC regulation No. 1272/2008 and its amendments.

Revision number	2
Revision date	15th October 2021
Supersedes date	January 2019
SDS number	SDS5071

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

1.1 Product Identifier

Product name	Fixative Aerosol
Product Code(s)	3133913 3133914
Other Details	No further information.

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

Uses advised against	N/A

1.3 Details of the supplier of the safety data sheet

Supplier	Specialist Crafts Ltd Hamilton House Mountain Road Leicester LE4 9HQ United Kingdom Email purchasing@specialistcrafts.com Telephone +44 (0)116 269 7711

1.4 Emergency telephone number

Emergency telephone	+44 (0)116 269 7711 This telephone number is available during office hours only, 09:00 to 17:00 GMT, Monday to Friday, excluding UK bank holidays and weekends. Language English

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

Classification	In compliance with EC regulation No. 1272/2008 and its amendments. Aerosol, Category 1 (Aerosol 1, H222 - H229). Eye irritation, Category 2 (Eye Irrit. 2, H319). This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.
Physical Hazards	No further information.
Health Hazards	No further information.
Environmental Hazards	No further information.

2.2 Label Elements

Hazard Statements	Mixture for aerosol application.
Signal Word	Danger  GHS07 GHS02 DANGER Hazard statements: H222 Extremely flammable aerosol. H229 Pressurised container: May burst if heated. H319 Causes serious eye irritation.
EU Specific Hazard Statements	No further information.
Precautionary Statements	Precautionary statements - General: P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read label before use. 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. P264 Wash hands thoroughly after handling. P280 Wear protective gloves/protective clothing/eye protection/face protection. Precautionary statements - Response: P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical advice/attention. Precautionary statements - Storage: P410 + P412 Protect from sunlight. Do no expose to temperatures exceeding 50 oC/122oF.
Other information	No further information.

2.3 Other Hazards

Other Hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European Chemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table
The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

SECTION 3: Composition/information on ingredients

3.1 Substances

Substances

No further information.

3.2 Mixtures

Mixtures

See below

Identification	**EC 1272/2008**	**Note**	**%**
CAS: 115-10-6 EC: 204-065-8 REACH: 01-2119472128-37 DIMETHYL ETHER	GHS04, GHS02 Dgr Flam. Gas 1, H220 Press. Gas, H280	[1]	25 <= x % < 50
CAS: 64-17-5 EC: 200-578-6 REACH: 01-2119457610-43 ETHANOL	GHS07, GHS02 Dgr Flam. Liq. 2, H225 Eye Irrit. 2, H319	[1]	10 <= x % < 25
CAS: 67-64-1 EC: 200-662-2 REACH: 01-2119471330-49 ACETONE	GHS07, GHS02 Dgr Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH:066	[1]	10 <= x % < 25
CAS: 106-97-8 EC: 203-448-7 REACH: 01-2119474691-32 BUTANE	GHS04, GHS02 Dgr Flam. Gas 1, H220 Press. Gas, H280	C [1]	10 <= x % < 25
CAS: 74-98-6 EC: 200-827-9 REACH: 01-2119486944-21 PROPANE	GHS04, GHS02 Dgr Flam. Gas 1, H220 Press. Gas, H280	[1]	2.5 <= x % < 10
INDEX: 603-002-00-5 CAS: 64-17-5 EC: 200-578-6 REACH: 01-2119457610-43 ETHANOL	GHS02 Dgr Flam. Liq. 2, H225	[1]	1 <= x % < 2.5

INDEX: 603-064-00-3 CAS: 107-98-2 EC: 203-539-1 REACH: 01-2119457435-35 MONOPROPYLENE GLYCOL METHYL ETHER	GHS02, GHS07 Wng Flam. Liq. 3, H226 STOT SE 3, H336	[1]	1 <= x % < 2.5

Information on ingredients:

[1] Substance for which maximum workplace exposure limits are available.
As a general rule, in case of doubt or if symptoms persist, always call a doctor.
NEVER induce swallowing by an unconscious person.

SECTION 4: First Aid Measures

4.1 Description of first aid measures

General Advice	As a general rule, in case of doubt or if symptoms persist, always call a doctor. NEVER induce swallowing by an unconscious person.
Inhalation	No further information.
Skin Contact	No further information.
Eye Contact	Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open. If there is any redness, pain or visual impairment, consult an ophthalmologist.
Ingestion	In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor. Keep the person exposed at rest. Do not force vomiting. Seek medical attention, showing the label. If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

4.2 Most important symptoms and effects, both acute and delayed

General Advice	No data available.
Symptoms	No data available.
Effects	No data available.

4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor	No data available.
Specific Treatments	No data available.

SECTION 5: Fire Fighting Measures

5.1 Extinguishing Media

Suitable Extinguishing Media	Flammable. Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires. Keep packages near the fire cool, to prevent pressurised containers from bursting. In the event of a fire, use: - sprayed water or water mist - water with AFFF (Aqueous Film Forming Foam) additive - halon - multipurpose ABC powder - BC powder Prevent the effluent of fire-fighting measures from entering drains or waterways.
Unsuitable Extinguishing Media	In the event of a fire, do not use: - water jet

5.2 Specific Hazards arising from the substance or mixture

Specific Hazards arising from the chemical	A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health. Do not breathe in smoke.
Hazardous combustion products	In the event of a fire, the following may be formed: - carbon monoxide (CO) - carbon dioxide (CO2)

5.3 Advice for fire fighters

Protective actions during firefighting	No further information.
Special protective equipment for fire fighters	Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	Consult the safety measures listed under headings 7 and 8. For non-first aid worker Because of the organic solvents contained in the mixture, eliminate sources of ignition and ventilate the area. Avoid any contact with the skin and eyes.

	For first aid worker First aid workers will be equipped with suitable personal protective equipment (See section 8).
Other information	No further information.
For emergency responders	See above.

6.2 Environmental precautions

Environmental precautions	Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal. Prevent any material from entering drains or waterways.

6.3 Methods and material for containment and cleaning up

Methods of containment	No further information.
Methods of cleaning up	Clean preferably with a detergent, do not use solvents.

6.4 Reference to other sections

Reference to other sections	No data available.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Advice on safe handling	Requirements relating to storage premises apply to all facilities where the mixture is handled. Always wash hands after handling. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.
General hygiene considerations	Fire prevention: Handle in well-ventilated areas. Vapours are heavier than air. They can spread along the ground and form mixtures that are explosive with air. Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits. Do not spray on a naked flame or any incandescent material. Do not pierce or burn, even after use. Use the mixture in premises free of naked flames or other sources of ignition and ensure that electrical equipment is suitably protected. Keep packages tightly closed and away from sources of heat, sparks and naked flames. Do not use tools which may produce sparks.

	Recommended equipment and procedures: For personal protection, see section 8. Observe precautions stated on label and also industrial safety regulations. Do not breathe in aerosols. Avoid eye contact with this mixture. Packages which have been opened must be reclosed carefully and stored in an upright position. Prohibited equipment and procedures: No smoking, eating or drinking in areas where the mixture is used.

7.2 Conditions for safe storage, including and incompatibilities

Storage conditions	Keep out of reach of children. Keep the container tightly closed in a dry, well-ventilated place. Keep away from all sources of ignition - do not smoke. Keep well away from all sources of ignition, heat and direct sunlight. The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area. Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C. Packaging Always keep in packaging made of an identical material to the original.
Storage Class	No further information

7.3 Specific End Use(s)

Risk management methods	No data available.
Other information	No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limits	See below.

European Union (2009/161/EU, 2006/15/EC, 2000/39/EC, 98/24/EC)

CAS	VME-mg/m3:	VME-ppm	VLE-mg/m3	VLE-ppm	Notes
115-10-6	1920	1000	-	-	-
67-64-1	1210	500	-	-	-
107-98-2	375	100	568	150	Peau

ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA	STEL	Ceiling	Definition	Criteria
64-17-5	1000ppm	-	-	-	-
67-64-1	500ppm	750ppm	-	-	-
106-97-8	1000ppm	-	-	-	-
74-98-6	1000ppm	-	-	-	-
64-17-5	1000ppm	-	-	-	-
107-98-2	100ppm	150ppm	-	-	-

Belgium (Order of 19/05/2009, 2010):

CAS	TWA	STEL	Ceiling	Definition	Criteria
115-10-6	1000ppm	-	-	-	-
64-17-5	1000ppm	1000ppm	-	-	-
67-64-1	500ppm	-	-	-	-
106-97-8	800ppm	-	-	-	-
64-17-5	1000ppm	-	-	-	-
107-98-2	100ppm	150ppm	-	-	-

France (INRS - ED984 :2008):

CAS	VME-ppm	VME-mg/m3	VLE-ppm	VLE-mg/m3	Notes	TMP No
115-10-6	1000	1920	-	-	-	-
64-17-5	1000	1900	5000	9500	-	84
67-64-1	500	1210	1000	2420	-	84
106-97-8	800	1900	-	-	-	-
64-17-5	1000	1900	5000	9500	-	84
107-98-2	50	188	100	375	-	84

Switzerland (SUVA 2009):

CAS	VME-mg/m3	VME-ppm	VLE-mg/m3	VLE-ppm	Temps	RSB
115-10-6	1910	1000	-	-	-	-
64-17-5	960	500	1920	1000	4x15	-
67-64-1	1200	500	2400	1000	4x15	B
106-97-8	1900	800	-	-	-	-
74-98-6	1800	1000	7200	4000	4x15	-
64-17-5	960	500	1920	1000	4x15	-
107-98-2	360	100	720	200	4x15	B

UK / WEL (Workplace exposure limits, EH40/2005, 2007) :

CAS	TWA	STEL	Ceiling	Definition	Criteria
115-10-6	400ppm	500ppm	-	-	-
64-17-5	1000ppm	-	-	-	-
67-64-1	500ppm	1500ppm	-	-	-
106-97-8	600ppm	750ppm	-	-	-
64-17-5	1000ppm	-	-	-	-
107-98-2	100ppm	150ppm	-	-	-

USA / AIHA WEEL (American Industrial Hygiene Association, Workplace Environmental Exposure Limit, 2010) :

CAS	TWA	STEL	Ceiling	Definition	Criteria
115-10-6	1000ppm	-	-	-	-

Germany - AGW (BAuA - TRGS 900, 21/06/2010) :

CAS	VME	VME	Excess	Notes
115-10-6	1000 ml/m3	1900 mg/m3	8 (II)	DFG
64-17-5	500 ml/m3	960 mg/m3	2 (II)	DFG. Y
67-64-1	500 ml/m3	1200 mg/m3	2 (II)	DFG
106-97-8	1000 ml/m3	2400 mg/m3	4 (II)	DFG
74-98-6	1000 ml/m3	1800 mg/m3	4 (II)	DFG
64-17-5	500 ml/m3	960 mg/m3	2 (II)	DFG.Y
107-98-2	100 ml/m3	370 mg/m3	2 (II)	DFG.Y

ACETONE (CAS: 67-64-1)
Final use: Workers.
Exposure method: Dermal contact.
Potential health effects: Long term systemic effects.
DNEL: 186 mg/kg body weight/day

Exposure method: Inhalation.
Potential health effects: Long term systemic effects.
DNEL: 1210 mg of substance/m3

Exposure method: Inhalation.
Potential health effects: Short term local effects.
DNEL: 2420 mg of substance/m3

Final use: Consumers.
Exposure method: Ingestion.
Potential health effects: Long term systemic effects.
DNEL: 62 mg/kg body weight/day

Exposure method: Inhalation.
Potential health effects: Long term systemic effects.
DNEL: 200 mg of substance/m3

Exposure method: Dermal contact.
Potential health effects: Long term systemic effects.
DNEL : 62 mg/kg body weight/day

Exposure method: Inhalation.
Potential health effects: Long term systemic effects.
DNEL : 200 mg of substance/m3

Predicted no effect concentration (PNEC):
ACETONE (CAS: 67-64-1)
Environmental compartment: Soil.
PNEC: 33.3 mg/kg

Environmental compartment: Fresh water.
PNEC: 10.6 mg/l

Environmental compartment: Sea water.
PNEC: 1.06 mg/l

Environmental compartment: Intermittent waste water.
PNEC: 29.5 mg/l

Environmental compartment: Fresh water sediment.
PNEC: 30.4 mg/kg

Environmental compartment: Marine sediment.
PNEC: 3.04 mg/kg

Environmental compartment: Waste water treatment plant.
PNEC: 100 mg/l

ETHANOL (CAS: 64-17-5)
Environmental compartment: Fresh water.
PNEC: 0.96 mg/l

Environmental compartment: Sea water.
PNEC: 0.79 mg/l

Environmental compartment: Intermittent waste water.
PNEC: 580 mg/l

Environmental compartment: Fresh water sediment.
PNEC: 3.6 mg/kg

Environmental compartment: Marine sediment.
PNEC: 2.9 mg/kg

8.2 Exposure controls

Protective equipment	Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE):  Use personal protective equipment that is clean and has been properly maintained. Store personal protective equipment in a clean place, away from the work area. Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas. Work clothing worn by personnel shall be laundered regularly. After contact with the product, all parts of the body that have been soiled must be washed.
Appropriate engineering controls	No further information.
Eye/Face Protection	Avoid contact with eyes. Use eye protectors designed to protect against liquid splashes

	Before handling, wear safety goggles with protective sides accordance with standard EN166. In the event of high danger, protect the face with a face shield. Prescription glasses are not considered as protection. Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours. Provide eyewash stations in facilities where the product is handled constantly.
Hand protection	Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374. Gloves must be selected according to the application and duration of use at the workstation. Protective gloves need to be selected according to their suitability for the workstation in question: other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required. Type of gloves recommended: - PVA (Polyvinyl alcohol) Recommended properties: - Impervious gloves in accordance with standard EN374
Respiratory Protection	Type of FFP mask: Wear a disposable half-mask aerosol filter in accordance with standard EN149. Category: - FFP1 Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387: - A1 (Brown) Particle filter according to standard EN143: - P1 (White)
Environmental Exposure Controls	No further information.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Fluid Liquid Spray.
Odour	No further information.
Odour threshold	No further information.
pH	Not relevant.
Melting/freezing point	No further information.
Initial boiling point and boiling range	No further information.
Flash point	No further information.

Evaporation rate	No further information.
Flammability (solid; gas)	No further information.
Upper/lower flammability or explosive limits	No further information.
Vapour pressure	Below 110 kPa (1.10 bar).
Vapour density	No further information.
Relative density	No further information.
Solubility(ies)	Soluble.
Partition coefficient	No further information.
Auto-ignition temperature	No further information.
Decomposition temperature	No further information.
Viscosity	No further information.
Explosive properties	No further information.
Oxidising properties	No further information.

9.2 Other information

Other information	No data available.

SECTION 10: Exposure controls/personal protection

10.1 Stability and Reactivity

Stability and reactivity	No data available.

10.2 Chemical Stability

Chemical Stability	This mixture is stable under the recommended handling and storage conditions in section 7.

10.3 Possibility of hazardous reactions

Possibility of hazardous reactions	When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

10.4 Conditions to avoid

Conditions to avoid	Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises. Avoid: heating - heat

10.5 Incompatible materials

Incompatible materials	Keep away from: - oxidising agents

10.6 Hazardous decomposition products

Hazardous decomposition products	The thermal decomposition may release/form: - carbon monoxide (CO) - carbon dioxide (CO2)

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity	Exposure to vapours from solvents in the mixture in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system. Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the mixture may cause removal of natural oil from the skin resulting in non-allergic contact dermatitis and absorption through the skin. May have reversible effects on the eyes, such as eye irritation which is totally reversible by the end of observation at 21 days. Splashes in the eyes may cause irritation and reversible damage. Acute toxicity: BUTANE (CAS: 106-97-8) Inhalation route (n/a) : LC50 = 658 mg/l Species: Rat DIMETHYL ETHER (CAS: 115-10-6) Inhalation route (n/a) : LC50 = 312 mg/l Species: Rat ACETONE (CAS: 67-64-1) Oral route : LD50 = 5800 mg/kg Species: Rat Dermal route : LD50 > 15800 mg/kg Species: Rabbit Inhalation route (n/a) : LC50 = 76 mg/l Species: Rat
Skin corrosion/irritation	No further information.
Serious eye damage/irritation	ETHANOL (CAS: 64-17-5) Causes serious eye irritation. Corneal haze:

	1 <= Average score < 2 and effects totally reversible within 21 days of Observation Conjunctival redness: 2 <= Average score < 2.5 and effects totally reversible within 21 days of observation
Skin sensitisation	No further information.
Respiratory sensitisation	No further information.
Germ cell mutagenicity	No further information.
Carcinogenicity	Monograph(s) from the IARC (International Agency for Research on Cancer) : CAS 64-17-5 : IARC Group 1 : The agent is carcinogenic to humans.
Reproductive toxicity	No further information.
Aspiration hazard	No further information.
Specific Target Organ Toxicity (Single and Repeated Exposure)	
STOT - single exposure	No further information.
STOT - repeated exposure	No further information.
Information on likely routes of exposure	
Inhalation	No further information.
Skin contact	No further information.
Eye contact	No further information.
Ingestion	No further information.
Symptoms related to the physical, chemical and toxicological characteristics	
Symptoms related to the physical, chemical and toxicological characteristics	No further information.

SECTION 12: Ecological information

12.1 Toxicity

BUTANE (CAS: 106-97-8)
Fish toxicity: LC50 = 24.11 mg/l
Duration of exposure: 96 h

Crustacean toxicity: EC50 = 14.22 mg/l
Species: Daphnia magna
Duration of exposure: 48 h

ACETONE (CAS: 67-64-1)
Fish toxicity: LC50 = 5540 mg/l
Species: Oncorhynchus mykiss
Duration of exposure: 96 h

Crustacean toxicity: EC50 = 8800 mg/l
Species: Daphnia magna

Duration of exposure: 48 h

Algae toxicity: NOEC = 430 mg/l
Duration of exposure: 96 h

DIMETHYL ETHER (CAS: 115-10-6)
Fish toxicity: LC50 > 4000 mg/l
Species: Poecilia reticulata
Duration of exposure: 96 h

Crustacean toxicity: EC50 = 755.449 mg/l
Species: Daphnia magna
Duration of exposure: 48 h

12.2 Persistence and degradability

Persistence and degradability

BUTANE (CAS: 106-97-8)
Biodegradability: no degradability data is available, the substance is considered as not degrading quickly.

DIMETHYL ETHER (CAS: 115-10-6)
Biodegradability: no degradability data is available, the substance is considered as not degrading quickly.

ACETONE (CAS: 67-64-1)
Chemical oxygen demand: DCO = 2.1 g/g

Five-day biochemical oxygen demand: DBO5 = 1.9 g/g

Biodegradability: Rapidly degradable.
DBO5/DCO = 0.90

12.3 Bioaccumulative potential

Bioaccumulative potential

BUTANE (CAS: 106-97-8)
Octanol/water partition coefficient: log Koe < 3.

ACETONE (CAS: 67-64-1)
Octanol/water partition coefficient: log Koe = -0.24

Bioaccumulation: BCF < 10

DIMETHYL ETHER (CAS: 115-10-6)
Octanol/water partition coefficient: log Koe = 0.18

12.4	Mobility in soil **Mobility in soil**	No data available.
12.5	Results of PBT and vPvB assessment **Results of PBT and vPvB assessment**	No data available.
12.6	Other adverse effects **Other adverse effects**	No data available. German regulations concerning the classification of hazards for water (WGK): WGK 1 (VwVwS vom 27/07/2005, KBws): Slightly hazardous for water.

SECTION 13: Disposal Conditions

13.1	General Information **General Information**	Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC. Do not pour into drains or waterways.
13.2	Disposal Methods **Disposal Methods**	Waste: Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals. Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company. Do not contaminate the ground or water with waste, do not dispose of waste into the environment. Soiled packaging: Empty container completely. Keep label(s) on container. Give to a certified disposal contractor.
13.3	Waste Class **Waste Class**	No further information.

SECTION 14: Transport Information

General Information

Generally for limited quantity packaging/limited load information, consult the relevant modal documentation using the data shown in this section.

Road transport notes refer to the Dangerous Goods List for information on any Special Provisions 216.

Sea transport notes refer to the Dangerous Goods List for information on any Special Provisions 216.
Air transport notes refer to the Dangerous Goods List for information on any Special Provisions A46.

14.1 UN Number

UN No. (ADR/RID)	1950
UN No. (IMDG)	
UN No. (ICAO)	
UN No. (ADN)	

14.2 UN proper shipping name

UN Proper shipping name (ADR/RID)	UN1950=AEROSOLS, flammable.
UN Proper Shipping Name (IMDG)	
UN Proper Shipping Name (ICAO)	
UN Proper Shipping Name (ADN)	

14.3 Transport Hazard Class(es)

ADR/RID class	
ADR/RID classification code	
ADR/RID label	
IMDG class 4.1	
ICAO class/division	
ADN class	
Transport labels	

14.4 Packing Group

ADR/RID Packing Group	
IMDG Packing Group	
ICAO Packing Group	
ADN Packing Group	

14.5 Environmental Hazards

Environmentally hazardous substance/marine pollutant	
Other Environmental Hazards	

14.6 Special Precautions for User

General Special Precautions	For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG. For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.
EmS	
ADR transport category	
Emergency Action Code	
Hazard Identification Number	
Tunnel Restriction Code	

Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis	EQ	Cat	Tunnel
	2	5F	-	2.1	-	1 L	190 327 344 625	E0	2	D

IMDG	Class	2° Label	Pack gr.	LQ	EMS	Provis	EQ
	2.1	See SP63	-	SP277	F-D, S-U	63 190 277 327 344 959	EO

IATA	Class	2° Label	Pack gr.	Passager	Passager	Cargo	Cargo	Note	EQ
	2.1	-	-	Forbidden	Forbidden	203	150 kg	A1 A145 A167 A802	E0
	2.1	-	-	Forbidden	Forbidden	-		A1 A145 A167 A802	E0

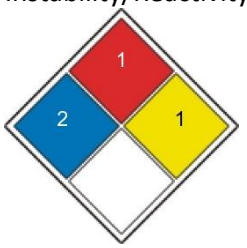
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code	No data available.

SECTION 15: Regulatory information

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

National Regulations	German regulations concerning the classification of hazards for water (WGK): WGK 1 (VwVwS vom 27/07/2005, KBws): Slightly hazardous for water.

	- Standardised American system for the identification of hazards presented by the product in view of emergency procedures (NFPA 704): NFPA 704, Labelling: Health=2 Inflammability=1 Instability/Reactivity=1 Specific Risk=none  - Swiss ordinance on the incentive tax on volatile organic compounds: 78-93-3 butanone (méthyléthylcétone) 67-64-1 acétone 115-10-6 éther diméthylique (oxyde de diméthyle) 64-17-5 éthanol, seulement s'il s'agit d'alcools impropres à la consommation (art. 31 de la loi fédérale sur l'alcool) 67-63-0 propane-2-ol (alcool isopropylique) 107-98-2 1-méthoxypropane-2-ol (éther 1-méthylique d'alpha-propylèneglycol) 64-17-5 éthanol, seulement s'il s'agit d'alcools impropres à la consommation (art. 31 de la loi fédérale sur l'alcool) 75-28-5 2-méthylpropane (alcool isobutylique,isobutane) 106-97-8 n-butane 74-98-6 propane
EU Regulations	Classification and labelling information included in section 2: The following regulations have been used: - Directive 75/734/CEE modified by directive 2013/10/UE - EU Regulation No. 1272/2008 amended by EU Regulation No. 487/2013. - EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013. - EU Regulation No. 1272/2008 amended by EU Regulation No. 944/2013. - EU Regulation No. 1272/2008 amended by EU Regulation No. 605/2014. - Container information: No data available. - Particular provisions: No data available.

15.2 Chemical Safety Assessment

Chemical Safety Assessments have been carried out by the Reach registrants for substances registered at >10 tpa.

Chemical Safety Assessment	No data available.

SECTION 16: Other information

16.1 Hazard statements in full

H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.
PNEC	Predicted No-Effect Concentration
ADR	European agreement concerning the international carriage of dangerous goods by Road.
IMDG	International Maritime Dangerous Goods.
IATA	International Air Transport Association.
ICAO	International Civil Aviation Organisation
RID	Regulations concerning the International carriage of Dangerous goods by rail.
WGK	Wassergefahrdungsklasse (Water Hazard Class).
GHS02	Flame
GHS07	Exclamation mark

16.2 Disclaimer

The information presented herein is believed to be accurate, but is not warranted to be, whether originating with the company or not. Recipients are advised to confirm, in advance of need, that the information is current, applicable, and suitable to their circumstances.

16.3 Revisions

Please note the revision information on page 1 of this document, indicating the last revision date of this data, the revision number and the date this revision supersedes

16.4 References

Suppliers and manufacturers safety data sheets

16.5 Abbreviations and acronyms

Please contact us, in advance of need, should you require clarification of common abbreviations or acronyms used in this safety data sheet

END OF SAFETY DATA SHEET