Multi Tech Clear+ 500ml

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

* **1.1. Product identifier**

Trade name/designation:

Multi Tech Clear+ 500ml

Article No.:
T214003

UFI:
9P6P-DDS8-5JJ7-J1SW

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

Use of the substance/mixture:
Lubricating agent

* **1.3. Details of the supplier of the safety data sheet**

Supplier:

KANDO Service GmbH
Hartleitnerstraße 3
4653 Eberstalzell
Austria
Telephone: +43 (0) 7241 213 79
E-mail: msds@kando.eu

1.4. Emergency telephone number

Vergiftungsinformationszentrale (VIZ), Stubenring 6, 1010 Wien, 24h: 01 406 43 43, Montag - Freitag: 8 bis 16 Uhr, Tel.: 01 406 68 98 (keine medizinische Auskunft) (Only available during office hours.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Hazard classes and hazard categories	Hazard statements	Classification procedure
Aspiration hazard *(Asp. Tox. 1)*	H304: May be fatal if swallowed and enters airways.	
STOT-single exposure *(STOT SE 3)*	H336: May cause drowsiness or dizziness.	
Hazardous to the aquatic environment *(Aquatic Chronic 3)*	H412: Harmful to aquatic life with long lasting effects.	
aerosol dispensers and lighters *(Aerosol 1)*	H222; H229: Extremely flammable aerosol. Pressurised container: May burst if heated.	

*
2.2. Label elements

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

Hazard pictograms:



GHS07
Exclamation mark



GHS02
Flame

Signal word: Danger

Hazard statements for physical hazards	
H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.

Hazard statements for health hazards	
H336	May cause drowsiness or dizziness.

Hazard statements for environmental hazards	
H412	Harmful to aquatic life with long lasting effects.

Supplemental hazard information	
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 spray.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.

Precautionary statements Response	
P312	Call a POISON CENTER/doctor/ if you feel unwell.

Precautionary statements Storage	
P405	Store locked up.
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Precautionary statements Disposal	
P501	Dispose of contents/container to an appropriate recycling or disposal facility.

Additional information:
Formation of explosive mixtures possible without adequate ventilation.

2.3. Other hazards

Other adverse effects:
The product does not meet the PBT/vPvB criteria.
The product does not contain any substances with endocrine-disrupting properties.

SECTION 3: Composition/information on ingredients

*
3.2. Mixtures

Additional information:
Impurities, test data or further information may have been taken into account for the classification and labelling of the product. The substances mentioned in this section are listed with their actual, applicable classification!

This means that for substances listed in Table 3.1 of Annex VI of Regulation (EC) No. 1272/2008 (CLP Regulation), any notes mentioned there have been taken into account for the classification mentioned here. The addition of the highest concentrations listed here may result in a classification. Only if this classification is listed in section 2 does it apply. In all other cases the total concentration is below the classification.

Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 109-66-0 EC No.: 203-692-4 Index No.: 601-006-00-1 REACH No.: 01-2119459286-30	**pentane** Aquatic Chronic 2 (H411), Asp. Tox. 1 (H304), Flam. Liq. 2 (H225), STOT SE 3 (H336)  Danger EUH066 **Acute Toxicity Estimate** ATE (oral) > 5,000 mg/kg ATE (dermal) > 2,000 mg/kg ATE (inhalation, gases) > 20 ppmV ATE (inhalation, vapour) > 25.3 mg/L **Additional information:** EUH066	20 – < 25 weight-%

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

* **4.1. Description of first aid measures**

General information:
First aider: Pay attention to self-protection! Never give anything by mouth to an unconscious person!

Following inhalation:
Remove person from danger zone. Fresh air supply, consult a doctor in case of complaints. If unconscious but breathing normally, place in recovery position and seek medical advice.

In case of skin contact:
Wash with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin irritation, consult a physician.

After eye contact:
Contact lenses must be removed. Rinse cautiously with water for several minutes. In case of eye irritation consult an ophthalmologist.

Following ingestion:
Rinse mouth thoroughly with water. Do NOT induce vomiting. Drink plenty of water. Immediately call a doctor. If vomiting occurs, keep head low so that stomach contents do not enter the lungs.

4.2. Most important symptoms and effects, both acute and delayed
If applicable, delayed symptoms and effects can be found in section 11. or in the routes of intake under section 4.1. In certain cases, the symptoms of poisoning may only appear after a longer period of time/ after several hours. Irritation to respiratory tract, Cough, Headache, Dizziness, Confusion, Nausea, Vomiting, Aspiration hazard, Pulmonary oedema, Chemical pneumonitis

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

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media:
Water spray jet, Foam, Carbon dioxide (CO2), Dry extinguishing powder

Unsuitable extinguishing media:
Full water jet

* **5.2. Special hazards arising from the substance or mixture**
In case of fire may be liberated: Carbon oxides, Sulphur oxides, toxic gases; Heating causes rise in pressure with risk of bursting. Formation of explosive/highly flammable vapour/air mixtures possible.

5.3. Advice for firefighters
Personal protection See section 8

Do not inhale explosion and combustion gases. Wear self-contained respiratory equipment. Depending on the size of the fire, full protection if necessary. Cool endangered containers with water spray. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Dispose of waste according to applicable legislation.

SECTION 6: Accidental release measures

* 6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:

In case of spillage or accidental release, to prevent contamination, wear personal protective equipment from section 8. Ensure adequate ventilation, remove sources of ignition. In case of solid or powdery products, avoid dust formation. Leave the danger zone as far as possible, use existing emergency plans if necessary. Keep unprotected persons away. Ensure adequate ventilation. Avoid contact with eyes, skin and inhalation. Avoid: Eye contact, Dermal. If necessary, observe the risk of slipping.

6.1.2. For emergency responders

Personal protection equipment:

Wear personal protection equipment (refer to section 8).

* 6.2. Environmental precautions

Notify emergency services in case of major spills. Prevent entry into sewers, cellars, working pits or other places where gas accumulation could be dangerous. Avoid penetration into surface and ground water as well as into the soil. In case of accidental discharge into drains, inform competent authorities.

* 6.3. Methods and material for containment and cleaning up

For cleaning up:

Absorb with liquid-binding material (sand, diatomaceous earth, acid binder, universal binder, sawdust).
For further information on disposal: see section 13.
Pour the collected material into a sealable container.

Other information:

Provide fresh air.

* 6.4. Reference to other sections

For further information on personal protective equipment: see section 8.
For further information on disposal: see section 13.

SECTION 7: Handling and storage

* 7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

Ensure good room ventilation. Avoid eye contact. Avoid prolonged or intensive skin contact. Do not eat, drink, smoke or store food in the work area. Observe the information on the label and the instructions for use. Avoid breathing vapours. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Do not use on hot surfaces.

Advices on general occupational hygiene

The usual precautions when handling chemicals must be observed.
Wash hands before breaks and after work. Keep away from food, drink and animal feed. Remove contaminated clothing and protective equipment before entering areas where food will be served.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels:

Store out of reach of unauthorised persons. Do not store the product in passageways and stairways. Store product only in the original packaging and closed. Observe special instructions for aerosols. Observe special storage conditions. Do not store together with oxidising or spontaneously combustible substances. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place. Keep cool.

Storage class (TRGS 510, Germany): 2B – Aerosol dispensers and lighters

7.3. Specific end use(s)

Recommendation:

Observe instructions for good working practice and recommendations for risk assessment. Consult hazardous substance information systems, e.g. of the professional associations, the chemical industry or various sectors depending on the application (building materials, wood, chemistry, laboratory, leather, metal).

SECTION 8: Exposure controls/personal protection

*

8.1. Control parameters

8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
MAK (AT)	**pentane** CAS No.: 109-66-0 EC No.: 203-692-4	② 1,200 ppm (3,600 mg/m³) ⑤ (max. 3x60 min./Schicht, Momentanwert)
IOELV (EU)	**pentane** CAS No.: 109-66-0 EC No.: 203-692-4	① 1,000 ppm (3,000 mg/m³)
MAK (AT)	**pentane** CAS No.: 109-66-0 EC No.: 203-692-4	① 600 ppm (1,800 mg/m³)
MAK (AT)	**butane** CAS No.: 106-97-8 EC No.: 203-448-7	① 800 ppm (1,900 mg/m³)
MAK (AT)	**butane** CAS No.: 106-97-8 EC No.: 203-448-7	② 1,600 ppm (3,800 mg/m³) ⑤ (max. 3x60 min./Schicht, Momentanwert)
MAK (AT)	**propane** CAS No.: 74-98-6 EC No.: 200-827-9	② 2,000 ppm (3,600 mg/m³) ⑤ (max. 3x60 min./Schicht, Momentanwert)
MAK (AT)	**propane** CAS No.: 74-98-6 EC No.: 200-827-9	① 1,000 ppm (1,800 mg/m³)
MAK (AT)	**isobutane** CAS No.: 75-28-5 EC No.: 200-857-2	② 1,600 ppm (3,800 mg/m³) ⑤ (max. 3x60 min./SchichtMomentanwert)
MAK (AT)	**isobutane** CAS No.: 75-28-5 EC No.: 200-857-2	① 800 ppm (1,900 mg/m³)

8.1.2. Biological limit values

No data available

8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type ② Exposure route
pentane CAS No.: 109-66-0 EC No.: 203-692-4	3,000 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
pentane CAS No.: 109-66-0 EC No.: 203-692-4	643 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
pentane CAS No.: 109-66-0 EC No.: 203-692-4	432 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects

Substance name	DNEL value	① DNEL type ② Exposure route
pentane CAS No.: 109-66-0 EC No.: 203-692-4	214 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
pentane CAS No.: 109-66-0 EC No.: 203-692-4	214 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects

Substance name	PNEC Value	① PNEC type
pentane CAS No.: 109-66-0 EC No.: 203-692-4	0.23 mg/L	① PNEC aquatic, freshwater
pentane CAS No.: 109-66-0 EC No.: 203-692-4	0.23 mg/L	① PNEC aquatic, marine water
pentane CAS No.: 109-66-0 EC No.: 203-692-4	3.6 mg/L	① PNEC sewage treatment plant
pentane CAS No.: 109-66-0 EC No.: 203-692-4	1.2 mg/kg bw/day	① PNEC sediment, freshwater
pentane CAS No.: 109-66-0 EC No.: 203-692-4	1.2 mg/kg	① PNEC sediment, marine water
pentane CAS No.: 109-66-0 EC No.: 203-692-4	0.55 mg/kg	① PNEC soil
pentane CAS No.: 109-66-0 EC No.: 203-692-4	0.88 mg/L	① PNEC aquatic, intermittent release

*
8.2. Exposure controls

8.2.1. Appropriate engineering controls

Ensure good ventilation. This can be achieved by local exhaust ventilation or general exhaust air. If this is not sufficient to keep the concentration below the occupational exposure limits (OEL), suitable respiratory protection must be worn. Applies only if exposure limits are listed here. Appropriate assessment methods for verifying the effectiveness of the protective measures taken include metrological and non-measured methods of determination. Such methods are described by e.g. EN 14042, TRGS 402 (Germany). EN 14042 "Workplace atmospheres. Guidance for the application and use of methods and equipment for the determination of chemical and biological agents". TRGS 402 (Germany) "Determining and assessing the hazards of activities involving hazardous substances - Inhalation exposure".

8.2.2. Personal protection equipment

Eye/face protection:

Safety goggles with side shields (EN 166).

Skin protection:

Hand protection:
Chemical-resistant protective gloves (EN ISO 374). Protective gloves made of Neoprene® / polychloroprene (EN ISO 374). Protective gloves made of nitrile (EN ISO 374). Protective gloves in Viton® / in fluoroelastomer (EN ISO 374). Minimum layer thickness in mm: 0.5. Permeation time (breakthrough time) in minutes: 480. The breakthrough times determined according to EN 16523-1 were not carried out under practical conditions. A maximum wearing time corresponding to 50% of the breakthrough time is recommended. Hand protection cream recommended.
Additional information on hand protection - No tests have been carried out. For mixtures, the selection was made to the best of our knowledge and based on the information provided by the ingredients. For substances, the selection was derived from the glove manufacturer's information. Final selection of glove material must be made with consideration of breakthrough times, permeation rates and degradation. The selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer. In the case of mixtures, the resistance of glove materials

cannot be calculated in advance and must therefore be checked before use. The exact breakthrough time of the glove material must be obtained from the protective glove manufacturer and must be observed.

Body protection:
Protective work clothing (e.g. safety shoes EN ISO 20345, long-sleeved work clothing).

Respiratory protection:
BEI exceeding exposure limit values: Filter A2/P2 (EN 14387), Identification colour: brown, white. Observe the wear time limits as specified by the manufacturer.

Other protection measures:
The usual precautions when handling chemicals must be observed. Wash hands before breaks and after work. Keep away from food, drink and animal feed. Remove contaminated clothing and protective equipment before entering areas where food will be served.

8.2.3. Environmental exposure controls
No data available

SECTION 9: Physical and chemical properties

* ### 9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid
Form: Aerosol
Colour: white
Odour: characteristic
flammability: No data available

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	*not applicable*		② insoluble in: Water
Melting point	*No data available*		
Freezing point	*No data available*		
Initial boiling point and boiling range	*No data available*		
Flash point	-60 °C		② (The flash point of the mixture was not tested, but corresponds to that of the ingredient with the lowest value)
Evaporation rate	*No data available*		
Auto-ignition temperature	*not applicable*		② Aerosol
Upper/lower flammability or explosive limits	*No data available*		
Vapour pressure	3,900 hPa	20 °C	② 8300 hPa (50°C)
Vapour density	*not applicable*		② Aerosol
Density	0.65 g/cm³		② 0,77 g/mL (Active agent)
Bulk density	*not applicable*		
Water solubility	practically insoluble		
Dynamic viscosity	*No data available*		
Kinematic viscosity	*not applicable*		② Aerosol

9.2. Other information
No data available

SECTION 10: Stability and reactivity

* ### 10.1. Reactivity
The product has not been tested.

10.2. Chemical stability
Stable under normal conditions of use and storage.

10.3. Possibility of hazardous reactions
No dangerous reactions known.

10.4. Conditions to avoid
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Heating causes rise in pressure with risk of bursting.

10.5. Incompatible materials
Avoid contact with strong oxidising agents.

10.6. Hazardous decomposition products
No decomposition when used as directed.

SECTION 11: Toxicological information

*

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

pentane CAS No.: 109-66-0 EC No.: 203-692-4
LD_{50} oral: >5,000 mg/kg (Rat)
LD_{50} dermal: >2,000 mg/kg (Rat)
LC_{50} Acute inhalation toxicity (gas): >20 ppmV 4 h (rat)
LC_{50} Acute inhalation toxicity (vapour): >25.3 mg/L 4 h (Rat) OECD 403
propane CAS No.: 74-98-6 EC No.: 200-827-9
LD_{50} oral: 5,840 mg/kg (Rat)
LD_{50} dermal: 13,900 mg/kg (Rabbit)
LC_{50} Acute inhalation toxicity (gas): >25 ppmV 4 h (Rat)
LC_{50} Acute inhalation toxicity (vapour): ≥50 mg/L 4 h (Rat)

11.2. Information on other hazards
No data available

SECTION 12: Ecological information

*

12.1. Toxicity

pentane CAS No.: 109-66-0 EC No.: 203-692-4
LC_{50}: 4.26 mg/L 4 d (fish, Oncorhynchus mykiss)
EC_{50}: 10.7 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata)
EC_{50}: 2.7 mg/L 2 d (crustaceans, Daphnia magna)
NOEC: 7.51 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata)
NOEC: 7.51 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata)
EC_{50}: 10.7 mg/L 3 d (Algae/water plant, Pseudokirchnerie lla subcapitata)
NOEC: 7.51 mg/L 3 d (Pseudokirchneriella subcapitata)
LC_{50}: 4.26 mg/L 4 d (Oncorhynchus mykiss)
propane CAS No.: 74-98-6 EC No.: 200-827-9
LC_{50}: 9,640 mg/L 4 d (fish, Pimephales promelas)
LC_{50}: 0.41 mg/L 4 d (fish, Oncorhynchus mykiss)
LC_{50}: 49.9 mg/L 4 d (fish)
EC_{50}: >100 mg/L (Algae/water plant, Bacteria)
EC_{50}: 0.17 mg/L 3 d (Algae/water plant, Selenastrum capricornutum)
EC_{50}: 69.43 mg/L 2 d (crustaceans, Daphnia) Calculation with the ECOSAR programme v1.00.
NOEC: 0.017 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata)
ErC_{50}: 19.37 mg/L 4 d (Algae/water plant, Algae) Calculation with the ECOSAR programme v1.00.
LOEC: 1,000 mg/L (Algae/water plant, Algae)
LOEC: 1,000 mg/L (Algae/water plant, Alge)
IC_{50}: 11.3 mg/L 3 d (Algae/water plant)

* 12.2. Persistence and degradability

pentane	CAS No.: 109-66-0 EC No.: 203-692-4
Biodegradation:	Yes, rapidly
propane	CAS No.: 74-98-6 EC No.: 200-827-9
Biodegradation:	Yes, rapidly
isobutane	CAS No.: 75-28-5 EC No.: 200-857-2
Biodegradation:	Yes, rapidly

12.3. Bioaccumulative potential

pentane	CAS No.: 109-66-0 EC No.: 203-692-4
Log K_{OW}:	3.39
propane	CAS No.: 74-98-6 EC No.: 200-827-9
Log K_{OW}:	1.09

12.4. Mobility in soil
No data available

* 12.5. Results of PBT and vPvB assessment

pentane	CAS No.: 109-66-0 EC No.: 203-692-4
Results of PBT and vPvB assessment:	—
butane	CAS No.: 106-97-8 EC No.: 203-448-7
Results of PBT and vPvB assessment:	—
propane	CAS No.: 74-98-6 EC No.: 200-827-9
Results of PBT and vPvB assessment:	—
isobutane	CAS No.: 75-28-5 EC No.: 200-857-2
Results of PBT and vPvB assessment:	—

12.6. Endocrine disrupting properties
No data available

* 12.7. Other adverse effects
water hazard class 2: obviously hazardous to water

SECTION 13: Disposal considerations

* 13.1. Waste treatment methods
The waste codes given are recommendations based on the expected use of this product. Due to the specific use and disposal conditions at the user's site, other waste codes may be assigned under certain circumstances. (2014/955/EU)
Disposal via waste water is not recommended. Observe local regulations. For example, suitable incineration plant. For example, dispose of in a suitable landfill.

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product

07 06 99	Wastes not otherwise specified
16 05 04 *	Gases in pressure containers (including halons) containing hazardous substances

**: Evidence for disposal must be provided.*

Waste code packaging

15 01 04	metallic packaging

Waste treatment options

Appropriate disposal / Package:
Dispose of waste according to applicable legislation.
Empty containers pose a potential fire and explosion hazard. Do not cut, pierce or weld containers.

Multi Tech Clear+ 500ml

SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
* **14.1. UN number or ID number**			
UN 1950	UN 1950	UN 1950	UN 1950
14.2. UN proper shipping name			
AEROSOLS	AEROSOLS	AEROSOLS	AEROSOLS
14.3. Transport hazard class(es)			
 2.1	 2.1	 2.1	 2.1
14.4. Packing group			
		-	
* **14.5. Environmental hazards**			
No data available	No data available	No data available	No data available
* **14.6. Special precautions for user**			
Limited quantity (LQ): 1 L **Classification code:** 5F **Tunnel restriction code:** (D) **Remark:** Transport category 2 Persons engaged in the carriage of dangerous goods shall be instructed. Safety regulations shall be observed by all persons involved in the carriage. Precautions shall be taken to prevent damage.	**Classification code:** - **Remark:** Persons engaged in the carriage of dangerous goods shall be instructed. Safety regulations shall be observed by all persons involved in the carriage. Precautions shall be taken to prevent damage.	**EmS-No.:** F-D, S-U **Remark:** Persons engaged in the carriage of dangerous goods shall be instructed. Safety regulations shall be observed by all persons involved in the carriage. Precautions shall be taken to prevent damage.	**Remark:** Persons engaged in the carriage of dangerous goods shall be instructed. Safety regulations shall be observed by all persons involved in the carriage. Precautions shall be taken to prevent damage.

* 14.7. Maritime transport in bulk according to IMO instruments

The freight is not carried as bulk goods but as general cargo, therefore not applicable. Minimum quantity regulations are not observed here. Hazard number and packaging code on request. Please observe the special provisions.

SECTION 15: Regulatory information

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

15.1.1. EU legislation

Restrictions on use:

Observe national regulations/laws on the protection of young people at work (especially the national implementation of Directive 94/33/EC)! Regulation (EC) No 1907/2006, Annex XVII: 2-(2-aminoethylamino)ethanol. Observe national regulations/laws on maternity protection (especially the national implementation of Directive 92/85/EEC)! Observe regulations of the employers' liability insurance association/occupational medicine.
Seveso category III
P3a FLAMMABLE AEROSOLS
Note Appendix I: 11.1
Quantity threshold (in tonnes) for dangerous substances referred to in Article 3(10) for the application of - requirements for lower-tier establishments 150
Quantity threshold (in tonnes) for dangerous substances referred to in Article 3(10) for the application of - requirements for upper-tier establishments 500

entry 18
Note Appendix I: 19
Quantity threshold (in tons) for use in lower class farms 50
Quantity threshold (in tons) for use in upper-tier establishments 200

Other regulations (EU):

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive], Hazard categories:
• P3a 'Flammable' aerosols Category 1 or 2, containing flammable gases Category 1 or 2 or flammable liquids

Named dangerous substances:
• Liquefied flammable gases, Category 1 or 2 (including liquefied petroleum gas) and natural gas

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds:

Volatile organic compounds (VOC) content in percent by weight: 74.9

15.1.2. National regulations

No data available

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

*

16.1. Indication of changes

1.1.	Product identifier
1.3.	Details of the supplier of the safety data sheet
2.2.	Label elements
3.2.	Mixtures
4.1.	Description of first aid measures
5.2.	Special hazards arising from the substance or mixture
6.1.	Personal precautions, protective equipment and emergency procedures
6.2.	Environmental precautions
6.3.	Methods and material for containment and cleaning up
6.4.	Reference to other sections
6.5.	Additional information
7.1.	Precautions for safe handling
8.1.	Control parameters
8.2.	Exposure controls
9.1.	Information on basic physical and chemical properties
10.1.	Reactivity
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008
12.1.	Toxicity
12.2.	Persistence and degradability
12.5.	Results of PBT and vPvB assessment
12.7.	Other adverse effects
13.1.	Waste treatment methods
14.1.	UN number or ID number
14.5.	Environmental hazards
14.6.	Special precautions for user
14.7.	Maritime transport in bulk according to IMO instruments
14.8.	Additional information
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture
15.3.	Additional information
16.1.	Indication of changes
16.2.	Abbreviations and acronyms

Limit value / limit values updated: SI

*
16.2. Abbreviations and acronyms

ACGIH	American Conference of Governmental Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
AGW	Threshold Limit Value
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
DNEL	derived no-effect level
EC_{50}	Effective Concentration 50%
EN	European Standard
ES	Exposure scenario
EWC	European Waste Catalogue
IC_{50}	Inhibition Concentration 50 %
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
KG	body weight
LC_{50}	Lethal (fatal) Concentration 50%
LD_{50}	Lethal (fatal) Dose 50%
MAK	Maximum concentration in the workplace air (CH)
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety & Health
NOEC	No Observed Effect Concentration
OECD	Organisation for Economic Cooperation and Development
OEL	Threshold Limit Value
OSHA	Occupational Safety & Health Administration
PBT	persistent and bioaccumulative and toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation and Authorization of Chemicals
RID	Dangerous goods regulations for transport by rail
TRGS	Technische Regeln für Gefahrstoffe
UN	United Nations
VOC	Volatile organic compounds

16.3. Key literature references and sources for data
No data available

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Aspiration hazard *(Asp. Tox. 1)*	H304: May be fatal if swallowed and enters airways.	
STOT-single exposure *(STOT SE 3)*	H336: May cause drowsiness or dizziness.	
Hazardous to the aquatic environment *(Aquatic Chronic 3)*	H412: Harmful to aquatic life with long lasting effects.	
aerosol dispensers and lighters *(Aerosol 1)*	H222; H229: Extremely flammable aerosol. Pressurised container: May burst if heated.	

16.5. List of relevant hazard statements and/or precautionary statements from sections 2 to 15

Hazard statements	
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.

Hazard statements	
H411	Toxic to aquatic life with long lasting effects.

Supplemental hazard information	
EUH066	Repeated exposure may cause skin dryness or cracking.

16.6. Training advice

No data available

16.7. Additional information

To the best of our knowledge, the information contained herein is accurate. However, neither the above-mentioned supplier nor its subsidiaries assume any liability with regard to the correctness or completeness of the information provided. A final determination of the suitability of individual materials is the sole responsibility of the user. All materials may involve unknown risks and should be used with caution. While certain risks are described herein, we cannot guarantee that these are the only possible risks.

* Data changed compared with the previous version.