

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

- **1.1 Product identifier**
- **Trade name:** MKE.K200
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Lubricant
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Marston Domsel GmbH
Bergheimer Str. 15
D-53909 Zülpich / DEUTSCHLAND
info@marston-domsel.de
Tel. +49 (0) 22 52 / 94 15 - 0
Fax +49 (0) 22 52 / 17 44
- **Further information obtainable from:**
Product safety department.
info@marston-domsel.de
- **1.4 Emergency telephone number:** +49 (0) 89-19240 (24h)

* **SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
Aerosol 3 H229 Pressurised container: May burst if heated.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms** Void
- **Signal word** Warning
- **Hazard statements**
H229 Pressurised container: May burst if heated.
- **Precautionary statements**
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.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251 Do not pierce or burn, even after use.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **2.3 Other hazards** not applicable
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

* **SECTION 3: Composition/information on ingredients**

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture: consisting of the following components: mineral oil, lubricant, and additives

· **Dangerous components:**

CAS: 29118-24-9	trans-1,3,3,3-Tetrafluoroprop-1-ene	⚠ Press. Gas C, H280	1-2.5%
ELINCS: 471-480-0			
Reg.nr.: 01-0000019758-54-xxxx			

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

GB

(Contd. on page 2)

Trade name: MKE.K200

(Contd. of page 1)

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:**
Personal protection for the First Aider.
Take affected persons out into the fresh air.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:**
Rinse opened eye for several minutes under running water. Remove contact lenses, if present and easy to do.
Continue rinsing. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
Foam
CO₂, powder or water spray. Fight larger fires with water spray.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Carbon monoxide (CO)
Danger of bursting by heating.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**
Collect contaminated fire fighting water separately. It must not enter the sewage system.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
Cool endangered receptacles with water spray and remove it out of emergency area if possible.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective clothing.
Ensure adequate ventilation.
- **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
- **6.3 Methods and material for containment and cleaning up:**
Pick up mechanically.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **6.4 Reference to other sections**
No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

GB

(Contd. on page 3)

Trade name: MKE.K200

(Contd. of page 2)

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Keep away from heat and direct sunlight.

Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care.

· Information about fire - and explosion protection:

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.

· 7.2 Conditions for safe storage, including any incompatibilities

· Storage:

· Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Store in a cool location under dry conditions in well sealed receptacles

Do not store in gangways or stairways.

Observe official regulations on storing packagings with pressurised containers.

· Information about storage in one common storage facility:

Do not store together with oxidizing and selfigniting materials.

· Further information about storage conditions:

Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.

Do not store together with oxidizing and self-igniting material.

SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· DNELs

29118-24-9 trans-1,3,3,3-Tetrafluoroprop-1-ene

Inhalative	wrks, long, system	3,902 mg/m ³ (mouse)
	cstm, long, system	830 mg/m ³ (mouse)

· PNECs

29118-24-9 trans-1,3,3,3-Tetrafluoroprop-1-ene

Oral	fresh water	0.1 mg/l (daphnia)
------	-------------	--------------------

· **Additional information:** The lists valid during the making were used as basis.

· 8.2 Exposure controls

· Personal protective equipment:

· **General protective and hygienic measures:** Wash hands before breaks and at the end of work.

· Respiratory protection:

Short term filter device:

Filter P2

· Protection of hands:

Preventive skin protection by use of skin-protecting agents is recommended.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

· Material of gloves

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.5 mm

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

(Contd. on page 4)

Trade name: MKE.K200

(Contd. of page 3)

- **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

· Form:	paste-like
· Colour:	White
· Odour:	Weak, characteristic
· Odour threshold:	Not determined.

· **pH-value:** Not determined.

· Change in condition

· Melting point/freezing point:	Undetermined.
· Initial boiling point and boiling range:	Undetermined.

· **Flash point:** Not applicable, as aerosol.

· **Flammability (solid, gas):** Not applicable.

· **Decomposition temperature:** Not determined.

· **Auto-ignition temperature:** Product is not selfigniting.

· **Explosive properties:** Product does not present an explosion hazard.

· **Vapour pressure:** Not applicable.

· **Density at 20 °C:** 1.26 g/cm³

· **Relative density** Not determined.

· **Vapour density** Not determined.

· **Evaporation rate** Not applicable.

· Solubility in / Miscibility with water:

Not miscible or difficult to mix.

· **Partition coefficient: n-octanol/water:** Not determined.

· Viscosity:

· Dynamic:	Not determined.
· Kinematic:	Not determined.
· VOC (EC)	0.0 g/l
· VOC (EU)	0.00 %
· VOCV (CH)	0.00 %

· **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.

· 10.2 Chemical stability

· **Thermal decomposition / conditions to be avoided:** To avoid thermal decomposition do not overheat.

· **10.3 Possibility of hazardous reactions** Danger of bursting.

· 10.4 Conditions to avoid

Heating, open flame, ignition sources.

No further relevant information available.

· **10.5 Incompatible materials:** No further relevant information available.

(Contd. on page 5)

Trade name: MKE.K200

(Contd. of page 4)

10.6 Hazardous decomposition products:

- No dangerous decomposition products occur when handling in accordance with the rules.
- No decomposition if used according to specifications.

SECTION 11: Toxicological information
11.1 Information on toxicological effects

- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Not hazardous for water.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must be specially treated adhering to official regulations.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue

13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils
16 05 04*	gases in pressure containers (including halons) containing hazardous substances
15 01 04	metallic packaging

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- | | |
|---------------------------------------|---------------|
| · 14.1 UN-Number | |
| · ADR, IMDG, IATA | UN1950 |
| · 14.2 UN proper shipping name | |
| · ADR | 1950 AEROSOLS |

(Contd. on page 6)

Trade name: MKE.DL200

(Contd. of page 5)

· **IMDG** AEROSOLS
 · **IATA** AEROSOLS, non-flammable

· **14.3 Transport hazard class(es)**· **ADR**

· **Class** 2.2 Gases.
 · **Label** 2.2

· **IMDG, IATA**

· **Class** 2.2
 · **Label** 2.2

· **14.4 Packing group**· **ADR, IMDG, IATA** Void· **14.5 Environmental hazards:**· **Marine pollutant:** No· **14.6 Special precautions for user**· **Danger code (Kemler):**· **EMS Number:**· **Stowage Code**

Warning: Gases.

-

F-D,S-U

SW1 Protected from sources of heat.

SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.

· **Segregation Code**

SG69 For AEROSOLS with a maximum capacity of 1 litre:

Segregation as for class 9. Stow "separated from" class 1 except for division 1.4.

For AEROSOLS with a capacity above 1 litre:

Segregation as for the appropriate subdivision of class 2.

For WASTE AEROSOLS:

Segregation as for the appropriate subdivision of class 2.

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

Not applicable.

· **Transport/Additional information:**· **ADR**· **Limited quantities (LQ)**· **Excepted quantities (EQ)**

1L

Code: E0

Not permitted as Excepted Quantity

· **Transport category**

3

· **Tunnel restriction code**

E

(Dangerous goods in "LQ" with more than 8 tons gross mass of LQ falls under the tunnel restriction code "E")

· **IMDG**· **Limited quantities (LQ)**· **Excepted quantities (EQ)**

1L

Code: E0

Not permitted as Excepted Quantity

(Contd. on page 7)

Trade name: MKE.K200

(Contd. of page 6)

 · **UN "Model Regulation":**

UN 1950 AEROSOLS, 2.2

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **National regulations:**
- **Waterhazard class:** Generally not hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
H280 Contains gas under pressure; may explode if heated.
- **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ctsm, long, system: general population, long-term exposure, systematic effects
cstm, short, system: general population, acute / short-term exposure, systematic effects
wrks, long, system: workers, long-term exposure - systemic effects
wrks, short, system: workers, acute / short-term exposure - systemic effects
cstm, long, local: general population, long-term exposure, local effects
STP: sewage treatment plant
ADR: Accord européen sur le transport des marchandises dangereuses par Route (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 Harmonised 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)
VOCV: Lenkungsabgabe auf flüchtigen organischen Verbindungen, Schweiz (Swiss Ordinance on volatile organic compounds)
VOC: Volatile Organic Compounds (USA, EU)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Aerosol 3: Aerosols – Category 3
Press. Gas C: Gases under pressure – Compressed gas
- *** Data compared to the previous version altered.**