

Material Safety Data Sheet According to 91/155 EEC

Printing date 27.10.2005 Reviewed on 09.07.2003

1 Identification of the substance/preparation and of the company/undertaking

· Product details

· Trade name: Klüberalfa PI 83-271

· Article number: 090107

· Application of the substance / the preparation Lubricant

· Manufacturer/Supplier:

KLÜBER LUBRICATION MÜNCHEN KG

Geisenhausenerstrasse 7 D-81379 München Tel.: 0049 (0) 897876-0 Fax: 0049 (0) 897876-333

· Further information obtainable from: Material Compliance Management

· Information in case of emergency: 0049 (0) 897876-700

2 Composition/information on ingredients

· Chemical characterization

 Description: perfluorinated polyether oil PTFE

· Dangerous components: Void

3 Hazards identification

· Hazard description: Not applicable.

· Information concerning particular hazards for human and environment:

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

4 First-aid measures

- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Wash off with soap and plenty of water.
- · After eve contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing: If symptoms persist consult doctor.

5 Fire-fighting measures

- · Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- Special hazards caused by the substance, its products of combustion or resulting gases: In case of fire, the following can be released: traces of fluorinated products

(Contd. on page 2)

(Contd. of page 1)

Material Safety Data Sheet According to 91/155 EEC

Printing date 27.10.2005 Reviewed on 09.07.2003

Trade name: Klüberalfa Pl 83-271

· Protective equipment:

Do not inhale explosion gases or combustion gases.

Standard procedure for chemical fires.

· Additional information

Cool endangered receptacles with water spray.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- · Person-related safety precautions: Not required.
- · Measures for environmental protection: Do not allow to enter sewers/ surface or ground water.
- · Measures for cleaning/collecting:

Pick up mechanically.

Dispose of the material collected according to regulations.

7 Handling and storage

- · Handling:
- · Information for safe handling: No special measures required.
- · Information about fire and explosion protection: No special measures required.
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Store in cool, dry conditions in well sealed receptacles.

- · Information about storage in one common storage facility: Store away from foodstuffs.
- · Further information about storage conditions: None.

8 Exposure controls/personal protection

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

- · Additional information: The lists valid during the making were used as basis.
- · Personal protective equipment:
- · General protective and hygienic measures:

Immediately remove all soiled and contaminated clothing

Avoid close or long term contact with the skin.

Be sure to clean skin thoroughly after work and before breaks.

Keep away from tobacco products.

- · Respiratory protection: Not required.
- · Protection of hands: Preventive skin protection by use of skin-protecting agents is recommended.
- · Eye protection: Not required.

9 Physical and chemical properties

· General Information

Form: Pasty
Colour: White
Odour: Odourless

· Change in condition

Melting point/Melting range: not melting

• Flash point: not applicable

(Contd. on page 3)

Material Safety Data Sheet According to 91/155 EEC

Printing date 27.10.2005 Reviewed on 09.07.2003

Trade name: Klüberalfa PI 83-271

(Contd. of page 2)

• **Danger of explosion:** Product does not present an explosion hazard.

· Density at 20°C: 1.94 g/cm³

· Solubility in / Miscibility with

water: Insoluble.

10 Stability and reactivity

· Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

Materials to be avoided:

strong bases

alkali metals

alkaline earth metals

Lewis acids

fluorine

Hydrogen fluoride (HF)

hydrofluoric acid

- · Dangerous reactions No dangerous reactions known.
- Dangerous decomposition products: > 280°C danger of forming toxic pyrolysis products.
- · Additional information:

Some materials (e.g. titanium, aluminium or alloys of these materials) may cause lower decompostion temperatures.

11 Toxicological information

Additional toxicological information:

Prolonged skin contact may cause skin irritation and/or dermatitis.

12 Ecological information

- · Ecotoxical effects:
- · Behaviour in sewage processing plants: The product can be mechanically separated.
- · General notes: Do not allow product to reach ground water, water course or sewage system.

13 Disposal considerations

- · Product:
- · Recommendation Can be incinerated in accordance with local and national regulations.
- · Waste disposal key:

For this product no waste disposal key according the European Waste Catalogue (EWC) can be determined, as only the purpose of application defined by the user enables an allocation. The waste code number has to be determined in accordance with the local waste disposer.

- · Uncleaned packaging:
- · Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

14 Transport information

- · Land transport ADR/RID (cross-border)
- · ADR/RID class: -

(Contd. on page 4)

Material Safety Data Sheet According to 91/155 EEC

Printing date 27.10.2005 Reviewed on 09.07.2003

Trade name: Klüberalfa Pl 83-271

(Contd. of page 3)

- · Maritime transport IMDG:
- · IMDG Class:
- · Air transport ICAO-TI and IATA-DGR:
- · ICAO/IATA Class: -
- · Transport/Additional information:

Not classified as dangerous according to the above specifications.

15 Regulatory information

· Labelling according to EU guidelines:

The product is not subject to classification according to the calculation methods of the "General Classification Guideline for Preparations of the EU" as issued in the latest valid version.

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.

- · Department issuing MSDS: Material Compliance Management
- · Contact: Tel.: +49 (0) 897876-1564
- * Data compared to the previous version altered.

GB