

## 1. Identification of the substance/mixture and of the company/undertaking:

### Product identifier

**Trade name:** Magnet-Particle-Suspension fluorescence (oil based)

**Article number:** MPS - F

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

### Application of the substance / the preparation

As Magnetic-Particle-Suspension at the Magnetic particle inspection  
by acc. to EN ISO 9934-1 (DIN 54 132) for finding surface cracks.

### Details of the supplier of the safety data sheet

#### Manufacturer/Supplier

Helmut Klumpf

Technische Chemie KG

Industriestr. 15

D - 45699 Herten Phone.: +49(0)2366 1003 - 0 Fax: +49(0)2366 1003 - 11 Email: klumpf@diffu-therm.de

**Emergency telephone number:** a.m. or next Emergency phone:

## 2. Hazards identification

### Classification of the substance or mixture

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

### Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labeled according to the CLP regulation.



**Hazard pictograms** GHS08

**Signal word** Danger

### Hazard statements

H304 May be fatal if swallowed and enters airways.

### Precautionary statements

P331 Do NOT induce vomiting.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### Additional information:

EUH066 Repeated exposure may cause skin dryness or cracking.

### Information pertaining to particular dangers for man and environment

Can cause irritation of the eyes, nose, throat and lungs. Repeated exposure may cause skin dryness or cracking.

### Other hazards

Danger of static electricity. Product can accumulate static, which can lead to an explosive electrical discharge.

Material can release vapours that readily form flammable mixtures.

The accumulation of vapours can fall flat or explode if ignited.

Combustible.

### Results of PBT and vPvB assessment

**PBT:** Not applicable. **vPvB:** Not applicable.

## 3. Composition/information on ingredients

**Chemical characterization:** Mixture of substances listed below and non-hazardous additions.

Components:	Name of chemical	weight %
CAS: 90622-58-5	aliphatic hydrocarbons, C11 - C13, Isoalkane, < 2% Aromatic	> 90
EINECS: 920-901-0	GHS08 Asp. Tox .1, EUH066, H304	

## 4. First aid measures

### Description of first aid measures

#### General information

Take affected persons out of danger area and instruct to lie down.

Personal protection for the First Aider.

Instantly remove any clothing soiled by the product.

#### After inhalation

Remove the person from the danger zone under proper respiratory protection . If breathing is irregular or stopped, give artificial respiration. Comfortable for the patients and provide medical help.

Seek medical treatment in case of complaints.



**After skin contact**

Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse.

**After eye contact**

Rinse opened eye for at least 15 minutes under running water. Get medical attention if irritation occurs.

**After swallowing** In case of persistent symptoms consult doctor.

**Information for doctor**

**Most important symptoms and effects, both acute and delayed** No further relevant information available.

**Indication of any immediate medical attention and special treatment needed**

If ingested, material may be aspirated into the lungs and cause chemical pneumonia. Treat appropriately.

## 5. Fire fighting measures

**Extinguishing media**

**Suitable extinguishing agents**

CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

**For safety reasons unsuitable extinguishing agents** Water with a full water jet.

**Special hazards arising from the substance or mixture**

Hazardous Combustion Products: Smoke, Fume, Incomplete combustion products, Oxides of carbon.

**Advice for firefighters**

Use water spray to cool fire exposed surfaces and to protect.

Runoff from fire control materials or dilution from entering into waters, sewers or drinking water supply.

Firefighters must use a standard protective equipment, including helmets with face protection and self-contained breathing protection equipment (SCBA).

**Protective equipment:** Put on breathing apparatus.

**Additional information**

Flammable.

Cool endangered containers with water spray jet.

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

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

Avoid contact with eyes and skin.

All persons whose presence is not necessary, remove from exposure.

Close leaks, if possible without personal risk to take.

In case of formation of gases / vapours / aerosols are breathing.

Do not breathe Gas / fumes / vapour / spray.

**Environmental precautions:**

Do not allow to enter drainage system, surface or ground water.

Prevent from spreading (e.g. by damming-in or oil barriers).

Do not allow to enter the ground/soil.

**Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

Send for recovery or disposal in suitable containers.

Larger amounts should be pumped into containers.

**Reference to other sections**

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

## 7. Handling and storage

**Handling**

**Precautions for safe handling**

Keep away from heat and direct sunlight.

Material can accumulate static charges which can cause an electrical spark (ignition source).

Measures against static discharges.

Keep containers tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

Open and handle container with care. Prevent formation of aerosols.

Avoid contact with eyes and skin. Do not breathe gas/fumes/vapour/spray.



**Information about protection against explosions and fires:**

Flammable mixtures may be formed in empty containers.

**Conditions for safe storage, including any incompatibilities**

**Storage:**

**Requirements to be met by storerooms and containers:**

Keep away from direct sunlight and other heat or ignition.

Fixed storage tanks, transfer tanks and the associated equipment should be properly grounded to prevent buildup of static charges.

Use only containers specifically permitted for this substance/product.

Country-specific requirements for the storage of low water-polluting substances have to be aware.

**Suitable container materials**

Tank cars, barrels

Store in clean steel or plastic containers.

**Suitable lining material:** Carbon steel, stainless steel, polyethylene, polypropylene, polyester, Teflon

**Unsuitable container- / liner materials:**

Natural rubber; butyl rubber, ethylene-propylene-diene monomer (EPDM); polystyrene

**Information about storage in one common storage facility:** Store away from oxidizing agents.

**Further information about storage conditions:** Keep container tightly sealed.

**Specific end use(s)** No further relevant information available.

**Storage class:** 10

## 8. Exposure controls/personal protection

**Additional information about design of technical systems:**

Control measures to: ensure that the load limits are not exceeded, should be provided for adequate ventilation.

Explosion-proof ventilation equipment.

**Control parameters**

**Components with critical values that require monitoring at the workplace:** Not required.

**Additional information:** The lists that were valid during the compilation were used as basis.

**Exposure controls**

**General protective and hygienic measures**

Do not eat, drink or smoke while working.

The usual precautionary measures should be adhered to in handling the chemicals.

Keep away from foodstuffs, beverages and food.

Wash hands during breaks and at the end of the work.

Do not inhale gases / fumes / aerosols.

**Breathing equipment:**

In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.

Use breathing protection in case of insufficient ventilation.

**Protection of hands:**

suitable protective gloves.

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

**Material of gloves**

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.

**Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:**

Safety glasses. Tightly sealed safety glasses.

**Body protection:** Protective work clothing.

## 9. Physical and chemical properties

**General Information**

Form: Liquid

Colour: Colourless/brown

Smell: Weak, characteristic

**Data relevant for safety:**

Boiling range: 170 - 250 °C

Flash point: > 61 °C

Ignition temperature: > 200 °C

Explosive properties: The Product is not explosive, but may form flammable/explosive vapour-air mixture.

Explosion limits	Lower e.l.:	0,6 Vol.%
	Upper e.l.:	7 Vol.%
Vapour pressure (20°C):		0,4 hPa
Density (20°C):		0,7 - 0,85 g/cm <sup>3</sup>
Solubility in water (20°C):		Not determined.
Viscosity (25°C):		1,3 - 2,5 mm <sup>2</sup> /s

## 10. Stability and reactivity

### Reactivity

**Chemical stability** The material is stable under normal conditions.

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

**Possibility of hazardous reactions** Hazardous polymerization will not occur.

### Conditions to avoid

Avoid shock, friction, heat, sparks, open flame and other ignition sources. Prevent electrostatic charging.

**Incompatible materials:** Reacts with strong oxidizing agents.

**Hazardous decomposition products:** This product does not decompose at ambient temperatures.

## 11. Toxicological information

The classification of risk is based on knowledge of the toxicity of the components contained in this product.

### Information on toxicological effects

#### Acute toxicity:

LD/LC50 values that are relevant for classification:		
Oral	LD50	> 5.000 mg/kg (rad)
Dermal	LD50	> 5.000 mg/kg (rabbit)
Inhaled	LC50	> 5.000 mg/l (rat)

#### Primary irritant effect:

##### on the skin:

Irritation possible

Data available. Test results or other study results do not meet the criteria for classification.

##### on the eye:

weak irritant effect

Data available. Test results or other study results do not meet the criteria for classification.

#### Irritation of the respiratory system

Can be fatal if swallowed and enters into the airways. Based on physico-chemical properties of the material.

**Sensitization:** No sensitizing effect known.

## 12. Ecological information

### Toxicity

#### Aquatic toxicity:

Material - Not expected to be harmful to aquatic organisms.

Material - Expected to aquatic organisms probably show no chronic toxicity.

**Persistence and degradability** The product is not easily, but potentially (inherently) degradable.

**Other information:** This substance is highly volatile and evaporates quickly into the air when it is released.

#### Behaviour in environmental systems:

**Bioaccumulative potential** No further relevant information available.

**Mobility in soil** Probably will not take place on the distribution of sediment and wastewater solids.

#### Additional ecological information:

##### General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

#### Results of PBT and vPvB assessment

The product is neither a PBT or vPvB substance, nor still contains PBT or vPvB substances.

**PBT:** Not applicable.

**vPvB:** Not applicable.

**Other adverse effects** No further relevant information available.



### 13. Disposal considerations

#### Waste treatment methods

##### Recommendation

The product is suitable for burning in an enclosed, controlled burner suitable for fuel value or disposal by supervised incineration at very high temperatures at which it does not come to the formation of undesired inflammatory products.

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Disposal must be made according the local authority regulations.

#### European waste catalogue -

##### Uncleaned packaging's:

##### Recommendation:

Empty contaminated packaging's thoroughly. They can be recycled after thorough and proper cleaning.

Packaging's that cannot be cleaned are to be disposed of in the same manner as the product.

### 14. Transport information

None Required.

**Land transport ADR/RID, Marine transport IMDG and Air transport ICAO-TI and IATA-DGR**

No danger goods in all transport regalement.

### 15. Regulatory information

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

**Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

**Hazard pictograms** GHS08

**Signal word** Danger

**Hazard statements**

H304 May be fatal if swallowed and enters airways.

**National regulations**

**Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

**Chemical safety assessment:** A Chemical Safety Assessment has been carried out.

### 16. Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally contractual relationship.

**Department issuing data specification sheet:**

**Contact:** Helmut. Klumpf Technische Chemie KG

**Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent