

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date: 12.12.2014

Version: 3. 0

Revision: 12.12.2014

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

· **1.1 Product identifier**

- Trade name: **P3**
- Project-No.: PK_0001_M

· **1.2 Relevant identified uses of the substance or mixture and uses advised against: -**

- Application of the substance / the preparation: Operating fluid / lubricant for vacuum pumps
- Uses advised against -

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

- **Supplier/Manufacturer:**
PFEIFFER VACUUM GmbH
Berliner Strasse 43
D-35614 Asslar
Telefon +49 6441 / 802-0
Telefax +49 6441 / 802-1202
www.pfeiffer-vacuum.net
Email: info@pfeiffer-vacuum.de

· **Email competent person:** sds@kft.de

· **Information department:** See supplier/manufacturer

· **1.4 Emergency telephone number:**

National Poison Information Service (NPIS)
24 hour national number professionals only
0844 892 0111

National Health Service (NHS)
24 hour national number consumer
England and Scotland: 111
Wales: 0845 46 47
Northern Ireland: call your local General Practitioner

Call 999 if there is a life-threatening incident.

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008** The product is not classified according to the CLP regulation.

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** not applicable

· **Information concerning particular hazards for human and environment:**

A health risk is not expected. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculata. Used oil may contain harmful impurities.

· **Classification system:**

The classification is based on Regulation (EC) 1272/2008 including its amendments, and on company information.

· **2.2 Label elements**

- Labelling according to Regulation (EC) No 1272/2008 Void
- Hazard pictograms Void
- Signal word Void
- Hazard statements Void

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- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable
- **vPvB:** Not applicable

SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**

- **Description:**
Highly refined mineral oils and additives. The highly refined mineral oil contains < 3% (W/W) DMSO extract, according to IP346.
- **Dangerous components:** Void
- **Additional information:**
IP346 = "Institute of Petroleum" (IP) Testmethod Nr. 346: Determination of polycyclic aromatics DMSO-extractable

SECTION 4: First aid measures

· **4.1 Description of first aid measures**

- **General information:** First aid personnel should pay attention to their own safety.
- **After inhalation:** Supply fresh air; consult a doctor in case of pain.
- **After skin contact:**
Remove contaminated clothes and shoes.
Wash with water and soap.
If skin irritation continues, consult a doctor.
- **After eye contact:**
Rinse opened eye for several minutes under running water.
If symptoms persist, consult a doctor.
- **After swallowing:** After swallowing large amounts, call a doctor

· **4.2 Most important symptoms and effects, both acute and delayed**

- Signs and symptoms of acne/folliculate: Blackheads and pimples on exposed skin.
- After swallowing:
Nausea
Vomiting
Diarrhoea

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

Symptomatic treatment

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**

- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
In small quantities: sand

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- Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** High volume water jet
- **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Complex mixture of solid and fluid particles and gases.
Carbon monoxide (CO)
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information:**
Heating leads to increased pressure and danger of bursting and explosion. Immediately cool neighbouring packages and containers with sprayed water and, if possible, remove them out of the danger zone.
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.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Avoid any product contact
Avoid contact with eyes and skin.
Do not breathe aerosol or vapors.
Particular danger of slipping on leaked/spilled product.
- **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Do not allow to penetrate the ground/soil.
- **6.3 Methods and material for containment and cleaning up:**
Dam up larger quantities and pump into containers.
Absorb with non-combustible material like sand, soil or diatomite.
Make sure to recycle or dispose of in suitable receptacles.
- **6.4 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 disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Avoid contact with eyes and skin.
Do not breathe aerosol or vapors.
Avoid inhalation of vapours formed by heated product.
- **Information about protection against explosions and fires:**
Use only in explosion protected area.
Observe the general rules of industrial fire protection.
Protect against electrostatic charges.

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Assure that devices and containers are grounded.

· 7.2 Conditions for safe storage, including any incompatibilities

· Storage:

· Requirements to be met by storerooms and receptacles:

Store container tightly sealed at a cool and dry place with sufficient ventilation.

Suitable material for containers and container coatings: soft stell or high-density polyethylene (HDPE).

Unsuitable material for receptacle: PVC

· Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from feed.

Refer to national regulations for storing hazardous chemicals.

· Further information about storage conditions: Store under cool, dry conditions in well sealed receptacles.

· Storage class: 10 Combustible liquids

· 7.3 Specific end use(s) No further relevant information available

SECTION 8: Exposure controls/personal protection

· Additional information about design of technical systems:

Install appropriate mechanical ventilation.

No further data; see section 7.

· 8.1 Control parameters

· Components 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.

· 8.2 Exposure controls

· Personal protective equipment:

· General protective and hygienic measures:

The usual precautionary measures should be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Before breaks and at the end of work, thoroughly wash hands with water and soap, then rub-in skin protecting cream.

Immediately remove soiled, soaked clothing and use again only after washing.

· Breathing equipment:

Under normal conditions of use not required

In case of unintentional release of substance, exceeding the occupational exposure limit value:

Suitable respiratory protective device recommended

Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapours (boiling point > 65 °C, 149 °F meeting EN 14387).

· Protection of hands:

Chemical resistant gloves (EN 374)

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

Selection of the glove material in consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves:

Nitrile rubber, NBR

PVC

Neoprene

The selection of suitable gloves depends upon the material, and also upon the quality of the gloves. The degree of protection will vary 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.

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- **Penetration time of glove material:**
The exact penetration time has to be found out by the manufacturer of the protective gloves and has to be observed.
> 480 °C
- **Eye protection:**
Safety glasses
Full-face mask
EN 166
- **Body protection:**
Protective work clothing
Safety footwear

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

- **General Information:**
- **Appearance:**
 - **Form:** Liquid
 - **Colour:** Yellowish
 - **Odour:** Light
Like hydrocarbons
 - **Odour threshold:** Not determined
 - **pH-value:** Not applicable
- **Change in condition:**
 - **Melting point/Melting range:** < -15 °C
 - **Boiling point/Boiling range:** > 280 °C (estimated)
 - **Pouring point:** -9 °C
 - **Flash point:** 260 °C (open cup)
 - **Flammability (solid, gaseous):** Not applicable
 - **Ignition temperature:** Not determined
 - **Decomposition temperature:** Not determined
 - **Self ignition temperature:** Autoignition temperature:
430 °C
 - **Danger of explosion:** Product does not present an explosion hazard.
 - **Explosion limits:**
 - **Lower:** 1 Vol %
 - **Upper:** 10 Vol % (based on mineral oil)
 - **Oxidizing properties:** Not determined
 - **Vapour pressure:** Not determined
 - **Density at 15 °C:** 0.866 g/cm³
 - **Relative density:** Not determined
 - **Vapour density at 20 °C:** > 1 (estimated value(s))
 - **Evaporation rate:** Not determined

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- **Solubility in / Miscibility with Water:** Not miscible or difficult to mix
- **Partition coefficient (n-octanol/water):** > 6 log POW (similar products)
- **Viscosity:**
 - dynamic: Not determined
 - kinematic at 40 °C: 95 mm²/s
- **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:** No decomposition if used and stored according to specifications
- **10.3 Possibility of hazardous reactions** Reacts with strong oxidising agents.
- **10.4 Conditions to avoid** Heat
- **10.5 Incompatible materials:** Strong oxidants
- **10.6 Hazardous decomposition products:**
 - No hazardous decomposition products if instructions for storage and handling are followed

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
 - **Acute toxicity:**
 - **LD/LC50 values that are relevant for classification:**
 - Oral LD₅₀ > 5000 mg/kg (rat) (geschätzt)
 - Dermal LD₅₀ > 5000 mg/kg (rabbit) (geschätzt)
 - **Primary irritant effect:**
 - **on the skin:** May cause irritation to the skin.
 - **on the eye:** Light irritation possible
 - **On respiratory tract:** Irritation of respiratory tract possible
 - **Sensitisation:** No sensitising effects known
 - **Other information (about experimental toxicology):**
 - **Carcinogenic, mutagenic effects and adverse effects on reproduction:**
 - Presently available data show no carcinogenic, mutagenic or teratogenic effects.
 - **Subacute to chronic toxicity:**
 - **STOT-single exposure** No experimental or epidemiological sufficient evidence for specific target organ toxicity (single exposure)
 - **STOT-repeated exposure:**
 - No experimental or epidemiological sufficient evidence for specific target organ toxicity (repeated exposure)
 - **Aspiration hazard** No classification

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· **Additional toxicological information:**

Highly refined mineral oils are not classified as a carcinogen by the International Research on Cancer (IARC).

Used oils may contain harmful impurities that have accumulated during use.

The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal. All used oil should be handled with caution and skin contact avoided as far as possible.

Classifications from other regulatory authorities under different regulatory frameworks can exist.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

Presently there are no ecotoxicological values available.

Poorly soluble mixture. May cause physical fouling of aquatic organisms.

Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l (to aquatic organisms) (LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract). Mineral oil is not expected to cause any chronic effects to aquatic organisms at concentrations less than 1 mg/l.

· **12.2 Persistence and degradability**

The product is not easily, but potentially biodegradable.

Some of the compounds could be persistent in the environment.

· **12.3 Bioaccumulative potential** log P (o/w) > 4 - Considerable bioaccumulation is to be expected.

· **12.4 Mobility in soil**

Liquid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.

· **Additional ecological information:**

· **General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous to water

According to appendix 4 of VwVwS dated 27.7.2005 (German regulation)

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

Danger to drinking water even if small quantities leak into the ground.

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable

· **vPvB:** Not applicable

· **12.6 Other adverse effects**

Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities. Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation:**

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

The used respectively the unused product should be recycled if possible.

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Disposal according to instructions of local authorities

· **European waste catalogue:**

13 00 00 OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05, 12 and 19)

13 02 00 waste engine, gear and lubricating oils

13 02 05* mineral-based non-chlorinated engine, gear and lubricating oils

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· **14.1 UN-Number**

· ADR, ADN, IMDG, IATA Void

· **14.2 UN proper shipping name**

· ADR, ADN, IMDG, IATA Void

· **14.3 Transport hazard class(es)**

· ADR, ADN, IMDG, IATA

· Class Void

· **14.4 Packing group**

· ADR, IMDG, IATA Void

· **14.5 Environmental hazards:**

· Marine pollutant: No

· **14.6 Special precautions for user**

Not applicable

· **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable
For Bulk transport: follow the rules of MARPOL Annex 1

· **Transport/Additional information:**

Not dangerous according to the above regulations

· **UN "Model Regulation":**

-

SECTION 15: Regulatory information

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

· **National regulations**

Class Share in %:

NK 3.0

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

- **Reasons for amendments:** Information Section 1
- **Replaces version dated:** 17.09.2014

· **Department issuing MSDS:**
 KFT Chemieservice GmbH
 Im Leuschnerpark. 3 64347 Griesheim
 Postfach 1451 64345 Griesheim
 Germany

Phone: +49 6155 86829-0 Fax: +49 6155 86829-25
 Safety Data Sheet Service: +49 6155 86829-22

· **Contact:** Dr. Faiza Khan

· **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
 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)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent

· **Sources:** MSDS of the supplier

· *** Data compared to the previous version altered.**

Changes have been made to sections marked with a *, as compared to the previous version.