

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Trade name : D1
Project-No. : PK_0007_M Made in Germany

1.2. Relevant identified uses of the substance or mixture and uses advised against**1.2.1. Relevant identified uses**

Use of the substance/mixture : Operating fluid / lubricant for vacuum pumps

1.2.2. Uses advised against

No additional information available

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

PFEIFFER VACUUM GmbH
Berliner Strasse 43
35614 Asslar - Deutschland
T +49 6441 / 802-0 - F +49 6441 / 802-1202
www.pfeiffer-vacuum.com - info@pfeiffer-vacuum.de

Email competent person

sds@kft.de

1.4. Emergency telephone number

Emergency number : 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 [CLP]**

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

EUH-statements : EUH210 - Safety data sheet available on request.

2.3. Other hazards

PBT: not relevant – no registration required
vPvB: not relevant – no registration required

SECTION 3: Composition/information on ingredients**3.1. Substances**

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|--|--|-----------|---|
| 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol | (CAS-No.) 119-47-1 (EC-No.) 204-327-1 | ≥0,1 - <1 | Repr. 2, H361 |

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---------------------------------------|--|
| First-aid measures general | : In all cases of doubt, or when symptoms persist, seek medical attention. |
| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. |
| First-aid measures after skin contact | : Wash skin with plenty of water. |
| First-aid measures after eye contact | : Rinse eyes with water as a precaution. |
| First-aid measures after ingestion | : Call a poison center or a doctor if you feel unwell. |

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

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 | : Use extinguishing media appropriate for surrounding fire. Water spray. Dry powder. Foam. Carbon dioxide. |
| Unsuitable extinguishing media | : Strong water jet. |

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon monoxide. Carbon dioxide.

5.3. Advice for firefighters

| | |
|--------------------------------|--|
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. |
| Other information | : Do not allow run-off from fire fighting to enter drains or water courses. Disposal must be done according to official regulations. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

| | |
|-------------------------|---|
| Methods for cleaning up | : Take up liquid spill into absorbent material. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. |
| Other information | : Disposal must be done according to official regulations. |

6.4. Reference to other sections

Information for safe handling. See section 7. Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

| | |
|-------------------------------|--|
| Precautions for safe handling | : Ensure good ventilation of the work station. Wear personal protective equipment. Take precautionary measures against static discharges. Prevent build-up of electrostatic charges (e.g. by grounding). |
| Hygiene measures | : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. |

7.2. Conditions for safe storage, including any incompatibilities

| | |
|--|---|
| Storage conditions | : Store in a well-ventilated place. Keep cool. |
| Incompatible materials | : oxidizing materials. Reducing agents. |
| Information about storage in one common storage facility | : Keep away from food, drink and animal feeding stuffs. |

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol (119-47-1) | |
|--|----------------------------|
| DNEL/DMEL (Workers) | |
| Acute - systemic effects, dermal | 3.175 mg/kg bodyweight/day |
| Acute - systemic effects, inhalation | 22.4 mg/m ³ |
| Long-term - systemic effects, dermal | 0.635 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 4.48 mg/m ³ |
| DNEL/DMEL (General population) | |
| Acute - systemic effects, dermal | 1.59 mg/kg bodyweight |
| Acute - systemic effects, inhalation | 5.5 mg/m ³ |
| Acute - systemic effects, oral | 1.59 mg/kg bodyweight |
| Long-term - systemic effects, oral | 0.318 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 1.1 mg/m ³ |
| Long-term - systemic effects, dermal | 0.318 mg/kg bodyweight/day |
| PNEC (Oral) | |
| PNEC oral (secondary poisoning) | 10 mg/kg food |

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Materials for protective clothing:

Use protective clothing

Hand protection:

Chemically resistant protective gloves. EN 374. Do not use : Natural rubber, Nitrile rubber, Butyl rubber, Polyvinylchloride (PVC), Polyethylene, Polychloroprene rubber (CR). Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed. Gloves must be replaced after each use and whenever signs of wear or perforation appear

Eye protection:

Use splash goggles when eye contact due to splashing is possible. EN 166

Skin and body protection:

Wear suitable protective clothing. EN 340. EN 13034

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Filter : P2. EN 143. Breathing equipment is only to be used in order to handle the residual risk of short term jobs if all other risk minimizing measures have been carried out e.g. retention and/or local exhaust

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

| | |
|---|-----------------------------------|
| Physical state | : Liquid |
| Appearance | : clear. |
| Colour | : Yellow. |
| Odour | : characteristic. |
| Odour threshold | : No data available |
| pH | : No data available |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : Not applicable |
| Freezing point | : -31 °C (ASTM D-97) |
| Boiling point | : No data available |
| Flash point | : > 250 °C (ASTM D-92) |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : Not applicable |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : No data available |
| Density | : 0.957 g/cm ³ (15 °C) |
| Solubility | : Water: Insoluble |
| Partition coefficient n-octanol/water (Log Pow) | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosive properties | : Product is not explosive. |
| Oxidising properties | : Non oxidizing. |
| Explosive limits | : No data available |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

Oxidizing agent. Reducing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|-----------------------------------|---|
| Acute toxicity (oral) | : Not classified (Based on available data, the classification criteria are not met) |
| Acute toxicity (dermal) | : Not classified (Based on available data, the classification criteria are not met) |
| Acute toxicity (inhalation) | : Not classified (Based on available data, the classification criteria are not met) |
| Skin corrosion/irritation | : Not classified (Based on available data, the classification criteria are not met) |
| Serious eye damage/irritation | : Not classified (Based on available data, the classification criteria are not met) |
| Respiratory or skin sensitisation | : Not classified (Based on available data, the classification criteria are not met) |
| Germ cell mutagenicity | : Not classified (Based on available data, the classification criteria are not met) |
| Carcinogenicity | : Not classified (Based on available data, the classification criteria are not met) |
| Reproductive toxicity | : Not classified (Based on available data, the classification criteria are not met) |
| STOT-single exposure | : Not classified (Based on available data, the classification criteria are not met) |
| STOT-repeated exposure | : Not classified (Based on available data, the classification criteria are not met) |
| Aspiration hazard | : Not classified (Based on available data, the classification criteria are not met) |

SECTION 12: Ecological information

12.1. Toxicity

| | |
|---|---|
| Hazardous to the aquatic environment, short-term (acute) | : Not classified (Based on available data, the classification criteria are not met) |
| Hazardous to the aquatic environment, long-term (chronic) | : Not classified (Based on available data, the classification criteria are not met) |

D1

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

12.2. Persistence and degradability

D1

Persistence and degradability : No additional information available.

12.3. Bioaccumulative potential

D1

Bioaccumulative potential : No additional information available.

12.4. Mobility in soil

D1

Ecology - soil : No additional information available.

12.5. Results of PBT and vPvB assessment

D1

PBT: not relevant – no registration required

vPvB: not relevant – no registration required

Component

6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol (119-47-1) : This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Other adverse effects : No additional information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Disposal must be done according to official regulations. European waste catalogue. Do not dispose of with domestic waste. Do not discharge into drains or the environment.
Product/Packaging disposal recommendations : Do not dispose of with domestic waste.
European List of Waste (LoW) code : 13 02 06* - synthetic engine, gear and lubricating oils

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

| ADR | IMDG | IATA | ADN | RID |
|---|---------------|---------------|---------------|---------------|
| 14.1. UN number | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| 14.2. UN proper shipping name | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| 14.3. Transport hazard class(es) | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| 14.4. Packing group | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| 14.5. Environmental hazards | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |

No supplementary information available

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

No change required according to maintenance check.

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) |
| ADN | Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways) |
| IATA | International Air Transport Association |
| IMDG | International Maritime Code for Dangerous Goods |
| 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 |
| ATE | Acute Toxicity Estimate |

| | |
|-------|---|
| BCF | Bioconcentration factor |
| CLP | Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008 |
| DMEL | Derived Minimal Effect level |
| DNEL | Derived-No Effect Level |
| EC50 | Median effective concentration |
| IARC | International Agency for Research on Cancer |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |
| LC50 | Median lethal concentration |
| LD50 | Median lethal dose |
| LOAEL | Lowest Observed Adverse Effect Level |
| NOAEC | No-Observed Adverse Effect Concentration |
| NOAEL | No-Observed Adverse Effect Level |
| NOEC | No-Observed Effect Concentration |
| OECD | Organisation for Economic Co-operation and Development |
| PBT | Persistent Bioaccumulative Toxic |
| PNEC | Predicted No-Effect Concentration |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SDS | Safety Data Sheet |
| STP | Sewage treatment plant |
| TLM | Median Tolerance Limit |
| vPvB | Very Persistent and Very Bioaccumulative |

Data sources : MSDS of the supplier. ECHA (European Chemicals Agency).
 Department issuing data : KFT Chemieservice GmbH
 specification sheet: Im Leuschnerpark. 3 64347 Griesheim
 Germany

Phone: +49 6155-8981-400 Fax: +49 6155 8981-500
 Safety Data Sheet Service: +49 6155 8981-522

Contact person : Dr. Lisa Schmitt

| | |
|--|--|
| Full text of H- and EUH-statements: | |
| Repr. 2 | Reproductive toxicity, Category 2 |
| H361 | Suspected of damaging fertility or the unborn child. |
| EUH210 | Safety data sheet available on request. |

KFT SDS EU 11

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.