FAG Rolling Bearing Grease Arcanol LOAD400

Properties, applications: Bearing grease for high loaded large bearings; low speed and shocks.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Unit</th>
<th>Value</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marking:</td>
<td></td>
<td>KP2N-20</td>
<td>DIN 51825</td>
</tr>
<tr>
<td>Colour:</td>
<td></td>
<td>beige</td>
<td></td>
</tr>
<tr>
<td>Temperature range:</td>
<td>°C</td>
<td>-25 to 140</td>
<td>DIN 51825</td>
</tr>
<tr>
<td>Longtime limit temperature:</td>
<td>°C</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>kg/dm³</td>
<td>appr. 0.9</td>
<td></td>
</tr>
<tr>
<td>Specifications:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thickener:</td>
<td>lithium/calcium</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of base oil:</td>
<td>mineral oil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Base oil viscosity at 40°C:</td>
<td>mm²/s</td>
<td>400</td>
<td>DIN 51562 - 1</td>
</tr>
<tr>
<td>at 100°C:</td>
<td>mm²/s</td>
<td>28</td>
<td>DIN 51562 - 1</td>
</tr>
<tr>
<td>Worked penetration:</td>
<td>[0,1 mm]</td>
<td>265-295</td>
<td>DIN ISO 2137</td>
</tr>
<tr>
<td>Consistency:</td>
<td>NLGI-Cl.</td>
<td>2</td>
<td>DIN 51818</td>
</tr>
<tr>
<td>Drop point:</td>
<td>°C</td>
<td>170</td>
<td>DIN ISO 2176</td>
</tr>
<tr>
<td>Oxidation stability:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pressure drop after 100 h at 99</td>
<td>kPa</td>
<td>&lt; 40</td>
<td>DIN 51808</td>
</tr>
<tr>
<td>Water resistance:</td>
<td>Range</td>
<td>1-90</td>
<td>DIN 51807 - 1</td>
</tr>
<tr>
<td>Flow pressure at -25 °C:</td>
<td>hPa</td>
<td>&lt; 1200</td>
<td>DIN 51805</td>
</tr>
<tr>
<td>Emcor Test:</td>
<td>Corr.Gr.</td>
<td>0/0</td>
<td>DIN 51802</td>
</tr>
<tr>
<td>Copper corrosion after 24 h/130 °C</td>
<td>Corr.Gr.</td>
<td>1</td>
<td>DIN 51811</td>
</tr>
<tr>
<td>Four ball weld load:</td>
<td>N</td>
<td>3400</td>
<td>DIN 51350 - 4</td>
</tr>
<tr>
<td>Wear scar of four ball test:</td>
<td>mm</td>
<td></td>
<td>DIN 51350 - 5</td>
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</tbody>
</table>

**FE8 tests (rolling element wear)**

<table>
<thead>
<tr>
<th>腚柔</th>
<th>v10 / v50</th>
<th>[mg]</th>
<th>/</th>
<th>19</th>
<th>DIN 51819</th>
</tr>
</thead>
<tbody>
<tr>
<td>536048 - 75/ 50 - RT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>536048 - 3000/ 10 - 120</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>536050 - 7,5/ 80 - 120</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>536050 - 7,5/ 80 - RT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FE9 tests (grease service lifetime)**

<table>
<thead>
<tr>
<th>腚柔</th>
<th>F10/F50</th>
<th>[h]</th>
<th>120 / 210</th>
<th>DIN 51821</th>
</tr>
</thead>
<tbody>
<tr>
<td>A / 1500 / 6000 - 130</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Speed range:</th>
<th>Unit</th>
<th>Ball bearings and cylindrical roller bearings</th>
<th>Other roller bearings*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed limit n*dm</td>
<td>[mm/min]</td>
<td>400,000</td>
<td>200,000</td>
</tr>
</tbody>
</table>

*) not cylindrical roller thrust bearings and spherical roller thrust bearings

This copy is not taken into account by the updating service.
The data are based on actual knowledge at the time of print and refer to the respective test method. Guaranteed properties or warranties cannot be taken over.

Edition: 18.08.03

FAG Kugelfischer AG, ein Unternehmen der INA-Schaeffler Gruppe
1. Identification of substance/preparation and company
   Identification of the substance or preparation
   Product name: FAG Arcanol LOAD400*)
   Company/undertaking identification
   Supplier:
   FAG Kugelfischer AG
   Postfach 1260
   D-97419 Schweinfurt
   Contact numbers: Tribology/Chemistry
   Tel. 09721/91-4681
   Fax 09721/91-1766
   Emergency number: Tel. 09721/91-0

2. Composition/information on ingredients
   Composition
   Description:
   Rolling bearing grease containing Lithium-Calcium soap as thickener, mineral oil (base oil) and additives.
   Dangerous components:
   CAS-Nr./Name, Content, Label, R-Phrases
   None

3. Hazards identification
   Prolonged or repeated exposure may give rise to dermatitis. Avoid spillage. Water endangering. Not readily biodegradable.

4. First-aid measures
   Other information
   Advice to physicians: Treat symptomatically.
   After inhalation
   Inhalation of any vapours from this product is not likely and does not present an acute hazard. Remove to fresh air. Seek medical advice.
   After contact with skin
   Remove contaminated clothing and wash affected skin with water and soap. If high pressure injection injuries occur, obtain medical attention immediately; surgery is urgently needed.
   After contact with eye
   Rinse immediately with plenty of water for several minutes and seek medical advice.
   After ingestion
   Do not induce vomiting. Oil compounds could get into lungs. Obtain medical attention.

5. Fire-fighting measures
   Suitable extinguishing media
   Dry fire extinguisher for fire group B, foam, chemical powder, carbon dioxide, water mist. Water mist for cooling endangered containers.
   Extinguishing media which must not be used for safety reasons
   Do not use water in a jet.
   Special hazards arising from the product itself, combustion products, gases
   Combustion is likely to give carbon monoxide, carbon dioxide, sulfur dioxide, soot, unburnt hydrocarbons, organic crack products.
   Special protective equipment for fire-fighters
   Fire-fighting in closed rooms requires trained personal with appropriate breathing equipment.

6. Accidental release measures
   Personal precautions
   Prevent skin and eye contact. Serious danger of skidding after spillage.
   Environmental precautions
   Prevent further leakage or spillage. Prevent from entering into drains, ditches or rivers by using appropriate barriers. After entering into surface water, drains or underground inform the appropriate authorities.
   Methods for cleaning up
   Shovel into a suitable, clearly marked container for disposal in accordance with local regulations.

7. Handling and Storage
   Handling
   When using do not eat or drink. When handling product in heavy containers safety footwear should be worn and proper handling equipment should be used. Prevent spillages or oil mist.
   Notice for fire and explosion protection: Fire group B according to EN 2. Oily clothes or papers must be handled like self-combusting substances.
   Storage

8. Exposure controls/personal protection
   Information on engineering measures
   Keep national regulations concerning inflammable and water endangering products.
   Occupational exposures to be controlled
   None. Avoid oil mist.
   Personal protection
   Respiratory protection: Not normally required. Use suction plant in case of oil mist.
   Hand protection: Neoprene, PVC or nitril rubber gloves if splashes are likely to occur and if applicable. Otherwise use cream against skin irritations.
   Eye protection: Safety spectacles if splashes are likely to occur.
   Skin protection: Minimise all forms of skin contact. Recommendation: Wear overalls.
   Hygiene measures: Avoid prolonged and repeated contact with skin. Remove contaminated clothes. Skin protection during work and skin care after work. Don't keep oily rags in your pockets. Keep away from foodstuff, beverages and animal food. When using do not eat, drink, smoke and do not take snuff.

9. Physical and chemical properties
   Appearance
   Semi-solid, colour beige, characteristic odour.
   Safety relevant data
   Dropping point (DIN ISO 2176) > 170 °C
   Flashpoint (DIN ISO 2592) > 200 °C (Base oil)
   Density (15 °C) approx. 930 kg/m³
   Solubility in water (20 °C) almost insoluble
10. Stability and reactivity

Conditions to avoid
Stable under normal use conditions.

Materials to avoid
Strong oxidising agents.

Hazardous decomposition products
None during normal handling and storage (see point 5 too).
Thermal decomposition possible if maximum operating temperature is exceeded.

Other information
None.

11. Toxicological information

Toxicological data
LD₅₀ oral (rat): > 2000 mg/kg (literature, similar products).

Known human effects
No negative effects known.

Other information
Expected to be slightly skin irritant after repeated exposition.
Not expected to be a skin sensitiser. Prolonged or repeated contact may cause defatting of the skin which can lead to dermatitis and may make the skin more susceptible to irritation and penetration by other materials.
Toxicological information given is based on a knowledge of the toxicology of similar products and of toxicology of components.

12. Ecological information

Degradability and accumulation
Product is not readily biodegradable.

Mobility
Floats on water. Semi-solid under most environmental conditions. No indication of bioaccumulation known.

Ecotoxicity
No data available. Product is removable nearly entirely from sewage plants mechanically. Nevertheless prevent from spreading or entering into drains, ditches or rivers.

Other information
Avoid spillage.

13. Disposal considerations

Product
Must not be disposed of together with household garbage.
Recommendation: Dispose to licensed disposal contractor (recycling or incineration).

Waste disposal No., EWC-Code: 120112 Used waxes and greases.
Contaminated packaging
Recommendation: Drain container thoroughly. Dispose to licensed disposal contractor. Cleaning by disposal contractor for recycling.

14. Transport information

Not dangerous for conveyance.

Land transport ADR/RID and GGVS/GGVE: Not dangerous.
Inland water transport ADN/ADNR: Not dangerous.
Sea transport IMDG/GGVSee: Not dangerous.
Air transport ICAO-TI and IATA-DGR: Not dangerous.

15. Regulatory information

EC classification
Not classified as dangerous.

National regulations
Germany: Gefahrstoffverordnung: Not classified as dangerous.
Störfallverordnung: Not listed in enclosure II.
VbF: Not classified.
TA-Luft: Class III (organic compounds), not applicable.
Water endangering group: WGK 2 water endangering (self-classification).

16. Other information

This information is based on our current knowledge of test results, comparison with similar products and information from subdeliverer. Technical data are health, safety and environmental information only. They are no technical product information.

Additional information:
Concawe report 5/87 Health Aspects of Lubricants, german translation DGMK-Bericht 400-7, source of supply Deutsche Gesellschaft für Erdöl, Erdgas und Kohle e. V., Steinstrasse 7, D-20095 Hamburg, Tel. 0049-40-326468.