

CONSTANT[®] OY 32 ... 390

Synthetic oils for sintered metal plain bearings



Description:

CONSTANT OY oils are technical products free from silicone raw materials for sintered metal plain bearings subject to high and low temperatures. Due to their special product formulation and additives, they cover a wide service temperature range, offer good anticorrosion properties, and in many cases can even be used for lifetime lubrication of sintered metal plain bearings.

Application:

CONSTANT OY oils are intended for use in sintered metal plain bearings in precision engineering, automotive and electrical applications as well as household appliances. For longer service life, MIKROZELLA G 8 OY N or MIKROZELLA G 100 OY N should be used as an oil reservoir.

Application notes:

CONSTANT OY oils are applied in a vacuum immersion process to fill the pores of sintered metal plain bearings.

Minimum shelf life:

The minimum shelf life is approx. 36 months if the product is stored in the closed original container in a dry place.

CONSTANT OY oils

- Resistant to oxidation
- Synthetic
- Good viscosity-temperature behaviour
- Lifetime lubrication of sintered metal plain bearings

Pack size:

20 l metal canister

Product data:

CONSTANT OY	32	46	68	100	150	220	390
Colour	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Service temperature range*, °C, approx.	-50 to 160	-50 to 160	-40 to 160	-40 to 160	-35 to 160	-30 to 160	-30 to 160
Density at 20 °C, DIN 51 757, g/ml, approx.	0.84	0.83	0.83	0.84	0.84	0.85	0.85
Refraction index, DIN 51 423 pt. 2, 20 °C, approx.	1.461	1.463	1.464	1.467	1.468	1.470	1.472
Kinematic base oil viscosity, DIN 51 562							
at 40 °C; mm ² /s, approx.	32	46	68	100	150	220	390
at 100 °C; mm ² /s, approx.	6.3	8.0	10.0	13.7	18.8	25.5	39.0
ISO VG, DIN 51 519	32	46	68	100	150	220	
Pour point, DIN ISO 3016, °C, approx.	< -50	< -50	< -45	< -40	< -40	< -40	< -35

* Service temperatures are guide values which depend on the lubricant's composition, the intended use and the application method. Lubricants change their consistency, apparent dynamic viscosity or viscosity depending on the mechano-dynamical loads, time, pressure and temperature. These changes in product characteristics may affect the function of a component.

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Safety Data Sheet

- 1.1 Product name:** a) CONSTANT OY 32, b) CONSTANT OY 46, c) CONSTANT OY 68, d) CONSTANT OY 100, e) CONSTANT OY 150, f) CONSTANT OY 220, g) CONSTANT OY 390
Code-No.: a) 028057, b) 028060, c) 028062, d) 028055, e) 028063, f) 028054, g) 028061

1.2 Klüber Lubrication München KG
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Telephone: ++49 - 89 - 7876 - 0 telephone exchange
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2. Composition/information on ingredients
Chemical characterization (preparation): synthetic hydrocarbon oil
Additional information: No hazardous ingredients

3. Hazards identification
No particular hazards known

4. First aid measures
After inhalation: Not applicable
After contact with skin: Wash off with soap and plenty of water
After contact with eyes: Rinse with plenty of water
After ingestion: Do not induce vomiting. Obtain medical attention
Advice to doctor: Treat symptomatically. If swallowed or in the event of vomiting, risk of product entering the lungs

5. Fire-fighting measures
Suitable extinguishing media: water spray, foam, dry powder, carbon dioxide (CO₂)
Unsuitable extinguishing media: high volume water jet
Special hazards: In case of fire the following can be released: Carbon monoxide, hydrocarbons
Special protective equipment for firefighters: Standard procedure for chemical fires.
Additional information: Water mist may be used to cool closed containers. In the event of fire and/or explosion do not breathe fumes.

6. Accidental release measures
Personal precautions: Risk of slipping due to leakage/spillage of product
Environmental precautions: Do not flush into surface water or sanitary sewer system
Methods for cleaning up/taking up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Dispose of absorbed material in accordance with the regulations
Additional information: None

7. Handling and storage
Advice on safe handling: Avoid formation of aerosol
Advice on protection against fire and explosion: No special precautions required
Requirements on storage rooms and vessels: No special storage conditions required
Incompatible materials: Incompatible with oxidising agents. Do not store together with food
Further information on storage conditions: Store at room temperature in the original container

8. Exposure controls/personal protection
Additional advice on system design: not applicable
Ingredients and specific control parameters: None
Respiratory protection: No special protective equipment required
Hand protection: No special protective equipment required
Eye protection: No special protective equipment required
Body protection: No special protective equipment required
Other protection measures: No special protective equipment required
General protection and hygiene measures: Avoid prolonged and/or repeated contact with skin. Clean skin thoroughly after work; apply skin cream. Remove soiled or soaked clothing immediately. Do not inhale aerosol

9. Physical and chemical properties
Form: liquid
Colour: yellow
Odour: characteristic
Pour point: < -50 °C, DIN ISO 3016
Flash point: > 220 °C, DIN ISO 2592
Flammability: not applicable
Ignition temperature: not applicable
Autoflammability: not applicable
Lower explosion limit: not applicable
Upper explosion limit: not applicable
Vapour pressure-first: not applicable
Density: approx. 0,84 g/cm³, 20 °C, DIN 51757
Water solubility: insoluble
pH value: not applicable
Kinematic viscosity: approx. 32 mm²/s, 40 °C, DIN 51562
Further information: None

10. Stability and reactivity
Conditions to avoid: Do not heat above flash point
Materials to avoid: Strong oxidising agents
Hazardous decomposition products: None under normal use
Additional information: None

11. Toxicological information
The toxicological data has been taken from products of similar composition.
Acute toxicity : LD50/oral/rat = > 2 g/kg (literature data)
Chronic toxicity : None
Human experience : Prolonged skin contact may cause skin irritation and/or dermatitis.

12. Ecological information
Information on elimination (persistence and degradability): Product is insoluble in water. May be separated out mechanically in purification plants
Behaviour in environmental compartments: Ecological injuries are not known or expected under normal use
Ecotoxic effects: The product has not been tested. Aquatic toxicity is unlikely due to low solubility
Additional information: Should not be released into the environment

13. Advice on disposal
Code of waste: 130202
Oil wastes (except edible oils, 05 00 00 and 12 00 00); waste engine, gear & lubricating oils; non-chlorinated engine, gear, lubricating oils
Disposal: Dispose of in accordance with your local, state and federal regulations as used oil for reconditioning
Dispose of contaminated packaging and recommended cleaning: Offer rinsed packaging material to local recycling facilities.

14. Transport information
GGVS/GGVE: not applicable
ADN/ADNR: not applicable
IMDG-Code: not applicable
ICAO/IATA-DGR: not applicable
Further Information: Not classified as dangerous in the meaning of transport regulations

15. Regulatory information
Labelling according to EU-guidelines: The product does not require a hazard warning label in accordance with EC-directives/German regulations on dangerous substances.

16. Other information
Issue-department of Safety Data Sheet: Chemical Documentation,
Tel.: +49 - 89 - 7876 - 564

The data in this product information is based on our general experience and knowledge at the time of printing and is intended to give information of possible applications to a reader with technical experience. It constitutes neither an assurance of product properties nor does it release the user from the obligation of performing preliminary tests with the selected product. We recommend contacting our Technical Consulting Staff to discuss your specific application. If required and possible we will be pleased to provide a sample for testing. Klüber products are continually improved. Therefore, Klüber Lubrication reserves the right to change all the technical data in this product information at any time without notice.



Klüber Lubrication München KG, a member of the Freudenberg group