

WOLFRACOAT® C

High-temperature lubricating paste



Description:

WOLFRACOAT C is a grey to copper-coloured high-temperature lubricating paste.

It has a chemical composition of synthetic hydrocarbon oil, silicate and pigments (e.g. copper, graphite).

The raw materials contain no lead, cadmium, nickel, sulphur or halogens.

Application:

In the entire range of plant engineering, e.g. power plants, chemical plants, refineries, in the iron and steel industry, in waste incineration plants, in the cement, lime, gypsum and fertilizer industries, in foundries, exhaust systems of combustion engines and in kiln installations.

Application notes:

Apply the paste in a thin layer to clean surfaces or threads or use a leather cloth to rub it on. It is important to obtain a uniform and coherent layer that is as thin as possible.

Minimum shelf life:

The minimum shelf life is approx. 24 months if the product is stored in the original closed container in a dry place.

Package sizes:

60 g tube
400 g grease cartridge
1.2 kg can
30 kg bucket

WOLFRACOAT C

- Efficient lubrication of friction points subject to sliding or rolling friction
- Efficient separation and lubrication of power-locking connections subject to static friction
- Improved sliding for easier assembly of press and transition fits
- Non-destructive disassembly of power-locking connections
- Approved for mining applications

Product data:

Colour, appearance	grey, copper-coloured
Texture	homogeneous, fibred
Density, DIN 51 757, at 20 °C, g/cm ³ , approx.	1.01
Drop point, DIN ISO 2176, °C	–
Worked penetration, at 25 °C, DIN ISO 2137 (ASTM-D 217); 0.1 mm	270 to 310
Service temperature range*, °C, approx.	– 30 to 200 above that dry lubrication to 1200
Base oil viscosity, DIN 51 561 at 40 °C, mm ² /s, approx.	120
Four-ball test, welding force, DIN 51 350 Pt 4, N	> 2500

* 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.

WOLFRACOA[®] C

Safety Data Sheet

1.1	Product name: WOLFRACOAT C Code-No.: 099 113	22.03.2002
1.2	Klüber Lubrication München KG Geisenhausenerstraße 7 D-81379 München Tel. ++49 - 89 78 76 - 0 telephone exchange Fax: ++49 - 89 78 76 - 333	Emergency telephone no.: ++49 - 89 7876 - 0
2.	Composition / information on ingredients Chemical characterization (preparation): Synthetic hydrocarbon oil, silicate, solid lubricants	
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	
5.	Fire-fighting measures Suitable extinguishing media: Water spray, foam, dry powder, carbon dioxide (CO ₂) 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: Not required Environmental precautions: Do not flush into surface water or sanitary sewer system Methods for cleaning up / taking up: Use mechanical handling equipment. Dispose of absorbed material in accordance with the regulations Additional information: None	
7.	Handling and storage Advice on safe handling: No special handling advice required Advice on protection against fire and explosion: No special precautions required Requirements on storage rooms and vessels: Store at room temperature in the original container Incompatible materials: Incompatible with oxidizing agents. Do not store together with food Further information on storage conditions: None	
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. Remove soiled or soaked clothing immediately. Clean skin thoroughly after work; apply skin cream	
9.	Physical and chemical properties Form: paste Colour: grey – copper Odour: characteristic	

Drop point	none, DIN ISO 2176
Flash point	> 180 °C (base oil)
Ignition temperature	not applicable
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Vapour pressure-first	not applicable
Density	approx. 1.01 g/cm ³ , 20 °C
Water solubility	insoluble
pH value	not applicable
Kinematic viscosity	not applicable
Further information	none

10. Stability and reactivity	
Conditions to avoid: None	
Materials to avoid: Strong oxidizing 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: Aquatic toxicity is unlikely due to low solubility	
Additional information: Should not be released into the environment	

13. Advice on Disposal	
Code of waste: 120 112, Wastes from shaping and surface treatment of metals and plastics; wastes from shaping (including forging, welding, pressing, drawing, turning, cutting and filling); spent waxes and fats	
Disposal: Can be incinerated when in compliance with local, state and federal regulations. The code of waste has to correspond to the Council Directive 75/442/EEC and be specific as far as the related sector and process are concerned	
Dispose of contaminated packaging and recommended cleaning: Offer rinsed packaging material to local recycling facilities	

14. Transport information	
GGVS / GGVE	not applicable
ADN / ADN R	not classified
IMDG-Code	9
UN number	3077
UN packaging group	III
EMS	None
Marine pollutant	PP
ICAO / IATA-DGR	9
UN/ID number	3077
ICAO-packaging group	III
Name: Environmentally hazardous substances, solid, n.o.s. (Copper metal powder)	
Further information: None	

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	
National regulations	

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