Klüber-Summit Varnasolv

Concentrated compressor conditioner



Description

Using mineral oils in rotary screw and sliding vane compressors can lead to varnish and carbon buildup in the entire system, thus increasing energy consumption, clogging lines and requiring more maintenance.

Klüber-Summit Varnasolv is a concentrated conditioner fluid which dissolves varnish and carbon residues during operation. With regular use of this product, it is no longer necessary to dismantle the compressor for flushing purposes.

Application

We recommend the use of Klüber-Summit Varnasolv especially when changing from a mineral compressor oil to our synthetic products of the Klüber-Summit DSL, Klüber-Summit SH, Klüber-Summit HySyn FG, Klüber-Summit Supra 32 and Klüber-Summit Supra Coolant series in order to eliminate time-consuming flushing processes prior to the conversion.

Application notes

Add Klüber-Summit Varnasolv to the compressor oil at a ratio of 10 % (i.e. add 1 liter of Klüber-Summit Varnasolv to 9 liters of compressor oil). Be sure to drain enough compressor oil to allow for the additional quantity.

Let the compressor continue operating for an additional 40 to 60 hours to dissolve all varnish and carbon residues. Completely drain the unit while the oil is still hot in order to prevent the dissolved residue from settling. Then exchange the filters and refill the unit with the synthetic Klüber-Summit oil.

Minimum shelf life

The minimum shelf life is approx. 60 months if the product is stored in the original closed container in a dry place.

Pack sizes

3.8 I canister 19 I canister

Compatibility

According to our knowledge, a 10 % concentration of Klüber-Summit Varnasolv in mineral oil is compatible with all materials normally resistant to mineral oil.

Klüber-Summit Varnasolv

- Dissolves varnish and carbon residues reliably
- Is used during operation, thus eliminating downtimes
- Saves costs by reducing maintenance needs

Product data

Color, aspect	light yellow, clear
Density, DIN 51 757, at 20 °C, g/ml, approx.	0.98
Kinematic viscosity, DIN 51 562 at 40 °C, mm ² /s, approx.	78
Flash point, DIN ISO 2592, °C	> 165

Klüber-Summit Varnasolv

Safety Data Sheet

1.1 Product name: Klüber-Summit Varnasolv

Code-No.: 050 017

Klüber Lubrication München KG, Geisenhausenerstr. 7 D-81379 Munich; Tel. (089) 7876-0, Fax (089) 7876-333

Emergency no.: (089) 7876-0

Composition/information on ingredients

Chemical characterization: Ester oil, emulsifier Additional information: No hazardous ingredients

3. Hazards identification

No particular hazards known.

4. First aid measures

Contact with skin: Wash off with soap and plenty of water.

Contact with eyes: Rinse with plenty of water.

Ingestion: Do not induce vomiting. Obtain medical attention.

Advice to doctor: Treat symptomatically.

Fire-fighting measures

Suitable extinguishing media: Water spray, foam, dry powder, CO₂ Unsuitable extinguishing media: High volume water jet Special hazards: In case of fire can be released: CO, hydrocarbons Special protecting equipment: Standard procedure for chemical fires. Additional information: Cool closed containers with water. Do not

breathe fumes.

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. Dispose of absorbed material in acc. with the regulations.

Additional information: None

7. Handling and storage

Safe handling: Avoid formation of aerosol.

Protection against fire and explosion: No special precautions required.

Requirements on storage rooms and vessels: -

Incompatible materials: Oxidazing agents; do not store together with

food.

Further information: 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

Personal protective equipment

Respiratory/hand/eye/body protection: 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. Do not inhale aerosol.

9. Physical and chemical properties

Form liquid Colour light yellow

Odour mild

Pour point no data available [°C]
Flash point > 165 [°C]
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 (20 °C) 0.98 [g/cm³]

Water solubility insoluble pH value not applicable

Kinematic viscosity, 40 °C 78 [mm²/s]

Further information None

0. Stability and reactivity

Conditions to avoid: Do not heat above flash point.

Materials to avoid: Strong oxidazing agents, strong acids and bases Hazardous decomposition products: None under normal use.

Additional information: None

11. Toxicological information

The toxicological data have been taken from products of similar composition.

Acute toxicity: LD₅₀ oral/rat = > 2g/kg (literature data)

Chronic toxicity: None

Human experience: Prolonged skin contact may cause skin irritation

and/or dermatitis.

12. Ecological information

Information on elimination: The 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

Can be incinerated when in compliance with your local, state and federal regulations.

Dispose of contaminated packaging and recommended cleaning: Offer rinsed packaging material to local recycling facilities.

14. Transport information

GGVS / GGVE: Cl. 9, no.11c; environmentally hazardous substances, liquid, n.o.s. (alcohol C13-C15 poly (1-6) ethoxylate)

ADN / ADNR: not applicable

IMDG / GGVsee: Cl. 9, 3082, III; marine pollutant P; alcohol C13-C15 poly (1-6) ethoxylate; environmentally hazardous substances, liquid, n.o.s.

ICAO / IATA: Class 9, 3082,III; environmentally hazardous substances, liquid, n.o.s. (alcohol C13-C15 poly (1-6) ethoxylate)

Further information: None

15. Regulatory information

Labelling: The product does not require a hazard warning label in acc. with EC directives/German regulations on dangerous substances.

16. Other information

None

The data in this brochure 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 without, however, constituting an assurance of properties for specific cases. We recommend contacting our Technical Consulting Staff for information regarding specific applications. If required and possible we will be pleased to provide a sample for testing.



Klüber Lubrication, a member of the Freudenberg Group