

MATERIAL SAFETY DATA SHEET

* 1 - Preparation and company identification

Identification of the preparation	Lubricant for hybrid compressor V60-17-0006
Preparation use	Lubricant for refrigeration and air conditioning systems.
Company:	VIEROL AG, Karlstraße 19, D-26123 Oldenburg Tel. n. +49 (0)441 - 210 20 - 0
Emergency telephone	Giftinformationszentrum Nord (Göttingen) + 49 (0)551/19240
Business references	info@vierol.de

2 - Hazards identification

Not dangerous good.

Main risks to health/environment No particular risks in normal working conditions. We recommend, however, to keep normal personal hygiene and to avoid frequent and prolonged contact. Use according to good working practice avoiding to disperse the product in the environment.

Hazards The substance is not regarded as hazardous according to the Directive 1272/2008/CE.

3 - Composition / Information on ingredients

The preparation does not contain any substance that require the declaration in accordance with regulation CE 1272/2008.

Components information	The content of DMSO extract, determined with the IP 346/92 method is lower than 3% in weight.
Chemical composition	Synthetic lubricants based on polyol esters.

* 4 - First aid measures

First aid measures required to treat the symptoms.

Inhalation	In case of exposure to high concentration of vapours or fogs move the person from contaminated area to well ventilated place. Seek medical assistance if necessary. If you suspect inhalation, urgently go to hospital.
Contact with the skin	Remove contaminated clothes and wash with soap and plenty of water. If irritation persist, get medical attention.
Contact with the eyes	Immediately flush eyes with plenty of water for a few minutes while keeping eyelids open. Get medical attention.
Ingestion	Do not induce vomit to avoid aspiration through the respiratory tract. Get medical attention.

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5 - Fire-fighting measures

Fire-fighting equipment	Nebulized water, carbon dioxide, alcohol-resistant foam, chemical extinguishing. Contaminated water must be disposed of in accordance with official regulations.
Inappropriate extinguishers	Do not use direct water jets. Use water jets just to cool down surfaces exposed to fire.
Specific dangers in case of exposition to the chemicals, its combustion products or gases	Avoid breathing combustion fumes that, in case of fire, can form carbon monoxide fuel gases, carbon dioxide and unburnt hydrocarbon fumes.
Specific protective equipment for fire-fighting personnel	Wear protective overalls with self-breathing equipment.

6 - Accidental release measures

Person - related safety precautions	Wear gloves, protecting clothes and glasses. In case of indoors significant spill avoid to breathe vapours by ventilating the area or by wearing breath protecting equipment. Remove possible ignition sources.
Environmental precautions	Avoid to disperse the product in ground, into sewers and into surface waters. If necessary inform local authorities.
Decontamination procedures	In case of significant spillage, stem and transfer product to suitable containers. Spillage on ground: stem spilled product with soil or sand, clean up spilled product and dispose according to local regulations. Spillage in water: stem immediately the spillage. Mechanically remove spilled product from the surface.

7 - Handling and storage

Handling	Avoid direct contacts with the product. Avoid breathing aerosol or product mist guaranteeing a suitable ventilation in working areas. Do not smoke and avoid any contact with ignition sources. Keep containers closed when not used.
Storage	Keep the product in original containers. Storage in a fresh place, away from heating sources and direct sun exposition. Avoid to accumulate electrostatic charge. Keep closed and covered the containers to avoid infiltrations of rain. Maintain suitable ventilation of the work place.
Empty containers	The containers contain product residues. Dispose the containers in safe ecological way according to the local regulations.

* 8 - Exposure controls / personal protection

According to data in our possession, any component presents no exposure limits in working place.

Exposure control	Avoid the formation of hazes or aerosol and use engineering controls, ventilation or localized aspiration if necessary.
Breathing equipment	Not necessary under normal working conditions.
Hands and skin protection	Wear gloves and protective overalls; change immediately contaminated clothes and wash them thoroughly before use. We recommend to keep normal personal hygiene and of working clothes. Wear gloves only after having thoroughly washed your hands.
Eyes protection	Wear safety protective glasses where it is possible to be in contact with the product.

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* 9 - Physical and chemical properties

Physical status- :	Liquid
Colour- :	transparent
Odour- :	Typical
pH :	Not applicable
Water Solubility- :	Insoluble
Density at 15°Ckg/l :	0,984
Kinematic Viscosity at 40°CcSt :	78.9
Flash Point (C.O.C.)°C :	>240
Pour Point°C :	-37

10 - Stability and reactivity

Reactivity and materials to avoid	Avoid contacts with strong acid, strong bases and oxidation agents. Avoid extreme heat and high energy sources of ignition.
Stability	Stable product in normal applications.

* 11 - Toxicological information

Skin contact	Frequent and prolonged contacts may parche and irritate the skin and cause dermatitis.
Eyes contact	It can cause burning sensation or transitory redness.
Oral toxicity	The product if swallowed can irritate the digestive apparatus and induce vomiting, cause nausea and diarrhea.
Inhalation	Long term exposure to the product mist can cause irritation to the respiratory system.

* 12 - Ecological information

Mobility	Not determined.
Degradability	Not determined.
Accumulation	Not determined.
Ecotoxicity	In compliance with EEC Regulations the product is not regarded as hazardous to the environment.

13 - Disposal considerations

General information	Do not dispel the environment. Comply with the current laws.
Disposal	Avoid to disperse the product on ground, into sewers and surface waters. Discharge the exhausted products and the containers through the authorized industries in compliance with the state and local regulations for disposal of this type of waste.

14 - Transport information

ADR-Classe:	Not dangerous
IATA-Classe:	Not dangerous
IMDG-Classe:	Not dangerous

Not hazardous for the transport.

Transport name	Lubricant for hybrid compressor 11.084
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15 - Regulatory information

Reference Laws

16 - Other information

Relevant R and H phrases

This Safety Data Sheet complies with the Regulation 453/2010/EEC.
Regulation (CE) 1272/2008 (GHS/CLP), D.E. 1999/45/CE, 2001/60/CE and related
regulations on "Classification, labelling and packaging of substances and mixtures".
Refer also to local laws.

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Warning

The information presented in this Material Safety Sheet is based on data believed to be accurate as of the date this Material Safety Data Sheet was prepared. The purpose of this data sheet is to inform and assume a correct technological use of the product. ELKE does not take any responsibility resulting from any damage or injury resulting from abnormal use.