
1. Identification of the substance/ mixture and of the company/ undertaking**Product identifier****Trade name:** LEYBONOL LVO 150**Product description:** Mineral oil with additives**Relevant identified uses of the substance or mixture and uses advised against****Uses:** Vacuum pump oil
NSF H1 Registered.
All components comply with FDA 21 CFR 178.3570 "Lubricants with Incidental Food Contact". It is intended for application on industrial and food equipment. It should not be added directly to the food product.

Order number:	Number	Package Size
	L15001	1 Liter
	L15020	20 Liter

Details of the supplier of the safety data sheet**Supplier:** Leybold GmbH
Bonner Strasse 498
D-50968 Cologne
Phone +49-221-347-0
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Internet www.leybold.com**E-Mail:** documentation@leybold.com**Emergency phone number:** +49/ (0)700 24112112 (OLC)

2. Hazards identification**Emergency Overview**

Appearance	viscous liquid
Colour	colourless
Odour	Mild petroleum oil like.

Potential Health Effects**Primary Routes of Entry:** Eye contact
Ingestion
Inhalation
Skin contact**Aggravated Medical Condition:** None known.**Carcinogenicity****IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.**ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

3. Composition/ information on ingredients

Substance / Mixture:	Mixture
Hazardous components:	No hazardous ingredients

4. First aid measures

If inhaled:	Move to fresh air. Artificial respiration and/or oxygen may be necessary. Seek medical advice.
In case of skin contact:	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Wash clothing before reuse. Seek medical advice.
In case of eye contact:	Remove contact lenses. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
If swallowed:	Rinse mouth with water. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Seek medical advice.
Most important symptoms and effects, both acute and delayed:	First aider needs to protect himself.

5. Firefighting measures

Extinguishing media

Suitable extinguishing media:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media:	No information available.
Specific hazards during firefighting:	Cool closed containers exposed to fire with water spray.
Hazardous combustion products:	Carbon oxides (CO, CO ₂), nitrogen oxides (NO _x), phosphorus oxides (PO _x), smoke and irritating vapours as products of incomplete combustion.
Further information:	Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas. Material can create slippery conditions.
Environmental precautions:	Do not allow uncontrolled discharge of product into the environment.

Methods and materials for containment and cleaning up:

Prevent further leakage or spillage if safe to do so.
Remove all sources of ignition.
Soak up with inert absorbent material.
Non-sparking tools should be used.
Ensure adequate ventilation.
Contact the proper local authorities.

7. Handling and storage**Advice on safe handling:**

For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Use only with adequate ventilation.
In case of insufficient ventilation, wear suitable respiratory equipment.
Avoid contact with skin, eyes and clothing.
Do not ingest.
Keep away from heat and sources of ignition.
Keep container closed when not in use.

Conditions for safe storage:

Store in original container.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Keep in a dry, cool and well-ventilated place.
Keep in properly labelled containers.
To maintain product quality, do not store in heat or direct sunlight.

8. Exposure controls/ personal protection**Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

Engineering measures:

No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal protective equipment**Respiratory protection:**

Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Filter type:

organic vapour filter

Hand protection**Material:**

neoprene, nitrile, polyvinyl alcohol (PVA), Viton(R).

Remarks:

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eye protection:

Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection:

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Protective measures:	Wash contaminated clothing before re-use. No special protective equipment required.
Hygiene measures:	Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash face, hands and any exposed skin thoroughly after handling.

9. Physical and chemical properties

Appearance:	viscous liquid
Colour:	colourless
Odour:	Mild petroleum oil like.
Odour Threshold:	No data available
pH:	No data available
Pour point :	-18 °C (-0.40 °F)
Boiling point/boiling range:	No data available
Flash point:	253 °C (4 87 °F) Method: Cleveland open cup
Fire Point:	No data available
Auto-Ignition Temperature:	No data available
Evaporation rate:	No data available
Flammability:	Low fire hazard. This material must be heated before ignition will occur.
Upper explosion limit:	No data available
Lower explosion limit:	No data available
Vapour pressure:	No data available
Relative vapour density:	No data available
Density:	0.8686 kg/l (15 °C / 59 °F)
Solubility(ies)	
Water solubility:	insoluble
Partition coefficient: noctanol/ water:	No data available
Viscosity	
Viscosity, kinematic:	63.34 cSt (40 °C / 104 °F) 8.41 cSt (100 °C / 212 °F)
Explosive properties:	Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

10. Stability and reactivity

Possibility of hazardous reactions:	Hazardous polymerisation does not occur. Stable under normal conditions.
Conditions to avoid:	No data available
Incompatible materials:	Reactive with oxidising agents, acids and alkalis.
Hazardous decomposition products:	May release COx, NOx, SOx, POx, SiOx, formaldehyde, smoke and irritating vapours when heated to decomposition.

11. Toxicological information

Information on likely routes of exposure:	Eye contact Ingestion Inhalation Skin contact
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Acute toxicity**Product****Acute oral toxicity**

Remarks: No data available

Acute inhalation toxicity

Remarks: No data available

Acute dermal toxicity

Remarks: No data available

Skin corrosion/irritation**Product**

Remarks: No data available

Serious eye damage/eye irritation**Product**

Remarks: No data available

Respiratory or skin sensitization:

No data available

Germ cell mutagenicity:

No data available

Carcinogenicity:

No data available

Reproductive toxicity:

No data available

STOT - single exposure:

No data available

STOT - repeated exposure:

No data available

Aspiration toxicity:No data available

12. Ecological information**Ecotoxicity****Product:****Toxicity to fish:**

Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates:

Remarks: No data available

Toxicity to algae:

Remarks: No data available

Toxicity to bacteria:

Remarks: No data available

Persistence and degradability**Product:****Biodegradability:**

Remarks: No data available

Bioaccumulative potential:

No data available

Mobility in soil:No data available

Other adverse effects: No data available

13. Disposal considerations

Disposal methods

Waste from residues: The product should not be allowed to enter drains, water courses or the soil.
Offer surplus and non-recyclable solutions to a licensed disposal company.
Waste must be classified and labelled prior to recycling or disposal.
Send to a licensed waste management company.
Dispose of as hazardous waste in compliance with local and national regulations.
Dispose of product residue in accordance with the instructions of the person responsible for waste disposal.

14. Transport information

International Regulation

IATA-DGR: Not regulated as a dangerous good

IMDG-Code: Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

49 CFR: Not regulated as a dangerous good

TDG: Not regulated as a dangerous good

Special precautions for user: Not applicable

15. Regulatory information

WHMIS Classification: Not Rated

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

The components of this product are reported in the following inventories

DSL: On the inventory, or in compliance with the inventory
TSCA: All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

IECSC: On the inventory, or in compliance with the inventory
EINECS: On the inventory, or in compliance with the inventory

16. Other information**History**

Date of issue:	September 9, 2009
Date of revision:	February 18, 2015
Version:	C0

| Indicates information that has changed from previously issued version.

Notice to reader

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity. The user bears sole liability for the precautions required when using the product. The information contained therein is protected by copyright and must not be reproduced or amended without the express written approval of Leybold. This document may be passed on only to the extent required by law. Any dissemination of our safety datasheets (e.g. as a document for download from the Internet) beyond this legally required extent is not permitted without express written consent.