

## 1. Identification of the substance/ mixture and of the company/ undertaking

### 1.1 Product identifier

<b>Trade name:</b>	LEYBONOL LVO 100	
<b>Product description:</b>	Mineral oil, free of additives	
<b>Order number:</b>	<b>Number</b>	<b>Package Size</b>
	L10001	1 Liter
	L10005	5 Liter
	L10020	20 Liter
	L10099	208 Liter

### 1.2 Details of the supplier of the safety data sheet

<b>Supplier:</b>	Leybold USA Inc. 5700 Mellon Road USA-Export, PA 15632 Phone +1-724-327-5700 Fax +1-724-325-3577 Internet www.leybold.com
<b>E-Mail:</b>	info.ex@leybold.com

### 1.3 Emergency telephone number

**Emergency telephone number:** +49/ (0)700 24112112 (OLC)

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## 2. Hazards identification

### Potential Health Effects

<b>Eye:</b>	No hazard in normal industrial use.
<b>Skin:</b>	No hazard in normal industrial use.
<b>Inhalation:</b>	No hazard in normal industrial use.
<b>Ingestion:</b>	May cause vomiting.
<b>Cancer:</b>	None of the components present in this material at concentrations equal or greater than 0.1% is listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

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## 3. Composition/information on ingredients

<b>Chemical characterization:</b>	Highly refined base oil (IP 346 DMSO extract < 3%)
<b>Substance / product identification:</b>	Index no. 649-454-00-7 CAS no. 64741-88-4 EC no. 265-090-8

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## 4. First aid measures

<b>General information</b>	In all cases of doubt, or when sickness symptoms persist, seek medical attention. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing.
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<b>After inhalation:</b>	Remove affected person from the immediate area. Ensure supply of fresh air.
<b>After skin contact:</b>	When in contact with the skin, clean with soap and water.
<b>After eye contact:</b>	Separate eyelids, wash the eyes thoroughly with water (15 min.).
<b>After ingestion:</b>	Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor.
<b>Advice to doctor</b>	
<b>Treatment:</b>	Treat symptomatically

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## 5. Firefighting measures

<b>Suitable extinguishing media:</b>	extinguishing powder; Foam; Carbon dioxide
<b>Extinguishing media that must not be used for safety reasons:</b>	Water
<b>Special exposure hazards arising from the substance or preparation itself, its combustion products or from resulting gases:</b>	In the event of fire, the following can be released: Carbon monoxide (CO); Carbon dioxide (CO <sub>2</sub> ); Combustion products of this material have to be classed invariably as respiratory poison.
<b>Special protective equipment for firefighting:</b>	As in any fire, wear self-contained breathing apparatus pressure - demand, MSHA/ NIOSH (approved or equivalent) and full protective gear.
<b>Other information:</b>	Run-off water from fire fighting must not be discharged into drains or enter surface water. Pressure increase, bursting and explosion hazard during heating.

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## 6. Accidental release measures

<b>Personal precautions:</b>	Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation.
<b>Environmental precautions:</b>	Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.
<b>Methods for cleaning up/taking up:</b>	Pick up with absorbent material (e.g., sand, sawdust, general-purpose binder). Send in suitable containers for recovery or disposal.

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## 7. Handling and storage

### Handling

<b>Advice on safe handling:</b>	Observe the usual precautions for handling chemicals. Provide good ventilation of working area (local exhaust ventilation, if necessary).
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## Storage

### Requirements for storage rooms and vessels:

Always keep in containers of same material as the original one. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

### Hints on storage assembly:

Do not store together with: Oxidizing agents

### Further information on storage conditions:

Keep container tightly closed and dry in a cool, well-ventilated place. Protect from heat and direct sunlight.

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## 8. Exposure controls/personal protection

### Exposure limit values:

None.

### Exposure controls

### Personal protective equipment

#### Respiratory protection:

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

#### Hand protection:

Glove permeation data does not exist for this material. The following glove(s) should be used for splash protection only. Appropriate Material rubber

#### Eye protection:

Use chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent).

#### Skin protection:

Normal chemical work clothing.

#### General protective and hygiene measures:

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Remove soiled or soaked clothing immediately. Wash soiled clothing immediately.

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## 9. Physical and chemical properties

### General information

Form: liquid  
Color: amber  
Odor: odorless

### Important health, safety and environmental information

#### Changes in physical state

Type: Pourpoint  
Value: 15.8 ° F

#### Flash point

Value: 482 ° F  
Method: Cleveland open cup

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**Explosion limits**

Upper explosion limit: 4,5 % vol  
Lower explosion limit: 0,45 % vol

**Density**

Value: 7.33 lbs/gallon  
Reference temperature: 59 ° F

**Viscosity**

Type: kinematic  
Value: 92 cSt  
Reference temperature: 104 ° F  
Type: kinematic  
Value: 10,6 cSt  
Reference temperature: 212 ° F

**Solubility in water**

Remarks: insoluble

**pH value**

Remarks: no data available

**10. Stability and reactivity**

**Conditions to avoid:** Protect from sun. Stable under recommended storage and handling conditions (See section 7).

**Materials to avoid:** Oxidizing agents

**Hazardous decomposition products:** Carbon monoxide and carbon dioxide

**11. Toxicological information****Acute toxicity****Acute oral toxicity**

LD50: > 5000 mg/kg  
Species: rat  
Source: IUCLID

**Acute dermal toxicity**

LD50: > 2000 mg/kg  
Species: rat  
Source: IUCLID

**Acute inhalational toxicity**

Remarks: No data available.

**Irritant/corrosive effects****Irritant effect on skin**

Species: rabbit  
Evaluation: slightly irritant  
Source: IUCLID

**Irritant effect on eyes**

Species: rabbit  
Evaluation: non-irritant  
Source: IUCLID

**Sensitization**

Species: guinea pig  
Evaluation: Non-sensitizing  
Source: IUCLID

**Effects after repeated or prolonged exposition (subacute, subchronic, cronic)**

Remarks: No data available.

**Mutagenicity:** No data available.

**Reproduction toxicity:** No data available.

**Carcinogenicity:** No data available.

**Experience in practice:** Inhalation of thermic decomposition products such as vapour, mist or smoke can affect health.

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**12. Ecological information****Ecotoxicity****Fish toxicity**

LC50: > 5000 mg/l  
Species: Oncorhynchus mykiss  
Duration of exposure: 96 h  
Source: IUCLID

**Daphnia toxicity**

EC50: > 1000  
Species: Daphnia magna  
Duration of exposure: 48 h  
Source: IUCLID

**Algae toxicity**

EC50: > 1000 mg/l  
Species: Scenedesmus subspicatus  
Duration of exposure: 96 h  
Source: IUCLID

**Results of PBT and vPvB assessment**

**PBT assessment:** The product is not considered to be a PBT.

**vPvB assessment:** The product is not considered to be a vPvB.

**Other information:** Do not discharge product unmonitored into the environment.

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**13. Disposal considerations**

**Product:** Dispose in accordance with federal, state and local regulations.

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**14. Transport information**

**Other information:** The product is not defined under national/international road, rail, sea and air transport regulations as a hazardous material. Not DOT regulated.

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## 15. Regulatory information

### US FEDERAL REGULATIONS

**Toxic Substances Control Act (TSCA):** All of the components of this product are either listed on the TSCA Inventory or are not subject to the notification requirements (exempt).

**Clean Water Act (CWA):** None of the ingredients is listed.

### OSHA

**OSHA:** None of the ingredients is "hazardous" according to the of the Hazard Communication Standard ( 29 CFR 1910.1200)

**SARA Section 302 (RQ):** None of the ingredients is listed.

### SARA 311/312

Hazard category: none

**SARA Section 313:** None of the ingredients is listed.

**HAPS Hazardous Air Pollutants:** None of the ingredients is listed.

### HMIS Classification

Health	0
Flammability	1
Reactivity	0
PPE	C

### NFPA Rating

Health	0
Fire Hazard	1
Reactivity	0

### CARCINOGENICITY

**IARC:** None of the ingredients is listed in group 1, 2A or 2B.

### US STATE REGULATIONS

**New Jersey Worker and Community Right to Know Act.**

### Following ingredients are listed

CAS no.: 64741-88-4

**California Proposition 65.:** None of the ingredients is listed.

### Pennsylvania HAZARDOUS SUBSTANCE LIST:

None of the ingredients is listed.

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## 16. Other information

### Abbreviations:

ACGIH American Conference of Governmental Hygienics  
CAS Chemical Abstracts Service  
HAPS Hazardous Air Pollutants  
HMIS Hazardous Material Identifikation System  
IARC International Agency for Research on Cancer  
IDLH Immediate Dangerous to Life and Health  
LEL Lower Explosion Limit  
NTP National Toxicology Program  
OEL Occupational Exposure Limit



# MATERIAL SAFETY DATA SHEET

LEYBONOL LVO 100

Date of issue: July 20, 2011

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**Canadian Abbreviations:**

OSHA Occupational Safety and Health Administration  
PEL Permissible Exposure Limit  
PPE Personal Protection Equipment  
SARA Superfund Amendments and Reauthorization Act  
STEL Short-Term Exposure Level (15 minutes)  
TWA Time-Weighted Average (8 hours)  
UEL Upper Explosion Limit  
VOC Volatile Organic Compounds  
WEEL Workplace Environmental Exposure Level  
DSL Domestic Substance List  
NDSL Non-Domestic Substance List  
NPRI National Pollutant Release Inventory  
TDG Transport Dangerous Goods Directorate  
WHMIS Workplace Hazardous Materials Information System

**History**

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**Version:** C0

**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.

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