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

Product identifier

Trade name: LEYBONOL LVO 210

Product description: Synthetic oil (ester oil with additives)

Relevant identified uses of the substance or mixture and uses advised against

Uses: Vacuum pump oil, Industrial

Recommended restrictions on use: For industrial use only.

Order number:	Number	Package Size
	L21000	0,5 liter
	L21001	1 liter
	L21002	2 liter
	L21005	5 liter
	L21020	20 liter
	L21099	208 liter

Details of the supplier of the safety data sheet

Supplier: Leybold GmbH
Bonner Strasse 498
D-50968 Cologne
Phone +49-221-347-0
Fax +49-221-347-1250
Internet www.leybold.com

E-Mail: documentation@leybold.com

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

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Chronic aquatic toxicity, Category 3: H412: Harmful to aquatic life with long lasting effects.

Classification (67/548/EEC, 1999/45/EC)

Dangerous for the environment: R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard statements: H412 Harmful to aquatic life with long lasting effects.

Supplemental Hazard Statements:

Precautionary statements:	Prevention: P273	Avoid release to the environment.
	Disposal: P501	Dispose of contents/ container to an approved waste disposal plant.

Additional Labelling: EUH208 Contains: N-1-naphthylaniline May produce an allergic reaction.

2.3. Other hazards: No information available.

3. Composition/ information on ingredients

3.2. Mixtures

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
N-1-naphthylaniline	90-30-2 201-983-0	Xn; R22 Xi; R43 N; R50/53	Acute Tox. 4; H302 Aquatic Acute 1; H400 Skin Sens. 1; H317 STOT RE 2; H373 Aquatic Chronic 1; H410	>= 0,25 - < 1

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. First aid measures

4.1. Description of first aid measures

If inhaled: If inhaled
Move to fresh air.
If not breathing, give artificial respiration.
If breathing is difficult, give oxygen.
In case of bluish discoloration (lips, ear lobes, fingernails), give oxygen as quickly as possible.
If symptoms persist, call a physician.

In case of skin contact: In case of skin contact
Wash off with soap and water.
Remove contaminated clothing and shoes.
Wash contaminated clothing before re-use.
Get medical attention if irritation develops and persists.

In case of eye contact: In case of eye contact
Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.

If swallowed: If swallowed, DO NOT induce vomiting. Consult a physician if necessary.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms: No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment: No information available.

5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Carbon dioxide (CO₂)
Dry powder
Foam
Alcohol-resistant foam
Water mist

Unsuitable extinguishing media: High volume water mist

5.2. Special hazards arising from the substance or mixture

Specific hazards during fire fighting: Burning produces noxious and toxic fumes.

5.3. Advice for firefighters

Special protective equipment for fire-fighters: In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

Further information: In the event of fire, cool tanks with water spray.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Use personal protective equipment. Ensure adequate ventilation.

6.2. Environmental precautions

Environmental precautions: Should not be released into the environment.
Do not contaminate water.
Do not flush into surface water or sanitary sewer system.

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up: Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

6.4. Reference to other sections: Forms slippery/greasy layers with water.

7. Handling and storage

7.1. Precautions for safe handling

Advice on safe handling: Handle in accordance with good industrial hygiene and safety practice.
Keep container closed when not in use.
Do not use pressure to empty drums.
Ensure all equipment is electrically grounded before beginning transfer operations.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers: Keep container tightly closed in a dry and well-ventilated place.

Other data: Stable under recommended storage conditions.

7.3. Specific end uses

Specific use(s): Raw material for industry

8. Exposure controls/ personal protection

8.1. Control parameters: Contains no substances with occupational exposure limit values.

8.2. Exposure controls

Personal protective equipment

Respiratory protection: Breathing apparatus needed only when aerosol or mist is formed. In the case of vapour formation use a respirator with an approved filter.

Hand protection: Neoprene gloves

Eye protection: Safety glasses with side-shields
Tightly fitting safety goggles

Skin and body protection: Impervious clothing

Hygiene measures: Avoid contact with skin, eyes and clothing. Provide adequate ventilation.
Do not breathe dust or spray mist.

Environmental exposure controls

General advice: Should not be released into the environment.
Do not contaminate water.
Do not flush into surface water or sanitary sewer system.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance: liquid
Colour: light yellow
Odour: No information available.
Odour Threshold: No information available.
Flash point: 250 °C
Method: Cleveland open cup ASTM D 92
Ignition temperature: No information available.
Lower explosion limit: No information available.
Upper explosion limit: No information available.
Flammability (solid, gas): No information available.
Autoignition temperature: No information available.
pH: Not applicable
No information available.
Vapour pressure: 0,957 g/cm³
Density: slightly soluble
Water solubility: No information available.
Partition coefficient: n- octanol/water: 98,5 mm²/s
at 40 °C
Solubility in other solvents:
Viscosity, kinematic: No information available.

Relative vapour density:

Evaporation rate:

Note: No information available.

9.2. Other information:

Oxidising potential

10. Stability and reactivity

10.1 Reactivity:

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability:

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions:

Hazardous polymerisation does not occur.

10.4 Conditions to avoid:

Heat.

10.5 Incompatible materials

Materials to avoid:

Strong acids and strong bases

10.6 Hazardous decomposition products

Hazardous decomposition products:

Carbon oxides

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity:

Remarks: Not classified due to lack of data.

Acute oral toxicity

N-1-naphthylaniline:

LD50: 1.625 mg/kg

Species: rat

Acute inhalation toxicity:

Remarks: Not classified due to lack of data.

Acute dermal toxicity:

Remarks: Not classified due to lack of data.

Acute dermal toxicity

N-1-naphthylaniline:

LD50 Dermal: > 5.000 mg/kg

Species: rabbit

Skin corrosion/irritation

Skin irritation:

Remarks: Not classified due to lack of data.

Skin irritation

N-1-naphthylaniline:

Species: rabbit

Result: No skin irritation

Method: Draize Test

Serious eye damage/eye irritation

Eye irritation:

Remarks: Not classified due to lack of data.

Eye irritation

N-1-naphthylaniline:

Species: rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

Respiratory or skin sensitization

Sensitisation:

Remarks: Not classified due to lack of data.

Sensitisation

N-1-naphthylaniline:

Maximisation Test
Species: guinea pig
Classification: May cause sensitization by skin contact.Patch Test
Species: Human
Classification: May cause sensitization by skin contact.**Germ cell mutagenicity**

N-1-naphthylaniline:

Ames test
Result: negativeChinese Hamster Ovary (CHO)
Result: negative**Genotoxicity in vivo**

N-1-naphthylaniline:

in vivo assay
Species: mouse
Result: negative**Mutagenicity Assessment:**

Remarks: Not classified due to lack of data.

Carcinogenicity Assessment:

Remarks: Not classified due to lack of data.

Reproductive toxicity Assessment:

Remarks: Not classified due to lack of data.

**Target Organ Systemic Toxicant –
Single exposure:**

Remarks: Not classified due to lack of data.

**Target Organ Systemic Toxicant –
Repeated exposure:**

Remarks: Not classified due to lack of data.

Toxicology Assessment:

Remarks: Not classified due to lack of data.

Further information:There is no data available for this product.

12. Ecological information

Toxicity

Toxicity to fish:

Remarks: no data available

Toxicity to fish

N-1-naphthylaniline:

LC50: 0,44 mg/l
Exposure time: 96 hSpecies: Oncorhynchus mykiss (rainbow trout)
semi-static test Analytical monitoring: yes**Toxicity to daphnia and other
aquatic invertebrates:**Remarks: no data available

Toxicity to daphnia and other aquatic invertebrates.

N-1-naphthylaniline: EC50: 0,68 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
semi-static test Analytical monitoring: yes

Toxicity to algae: Remarks: no data available

Toxicity to daphnia and other aquatic invertebrates. (Chronic toxicity)

N-1-naphthylaniline: NOEC: 0,02 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Analytical monitoring: yes

12.2 Persistence and degradability

Biodegradability: Remarks: no data available

Biodegradability

N-1-naphthylaniline: aerobic
Result: According to the results of tests of biodegradability this product is not readily biodegradable.
0 %
Method: OECD Test Guideline 301

12.3 Bioaccumulative potential

Bioaccumulation: Remarks: no data available

Bioaccumulation

N-1-naphthylaniline: Species: Cyprinus carpio (Carp)
Exposure time: 56 d
Temperature: 25 °C
Concentration: 0,1 mg/l
Bioconcentration factor (BCF): 427 - 2.730

12.4 Mobility in soil

Mobility: Remarks: no data available

12.5 Results of PBT and vPvB assessment:

This substance is not considered to be persistent, bioaccumulating and toxic (PBT).
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6. Other adverse effects

Additional ecological information: There is no data available for this product.

13. Disposal considerations**13.1 Waste treatment methods**

Product: Dispose of in accordance with the European Directives on waste and hazardous waste.
Dispose of wastes in an approved waste disposal facility.

Contaminated packaging: Do not burn, or use a cutting torch on, the empty drum.

14. Transport information

ADR:	Not dangerous goods
IATA:	Not dangerous goods
IMDG:	Not dangerous goods
RID:	Not dangerous goods

15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Candidate List of:
Substances of Very High
Concern for Authorisation
(Article 59). This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

Candidate List of Substances of
Very High Concern for Authorisation: This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

Major Accident Hazard Legislation: 96/82/EC Update: 2003
Directive 96/82/EC does not apply

Water contaminating class
(Germany) : WGK 1 slightly water endangering self classification

Notification status

US.TSCA:	On TSCA Inventory
DSL:	All components of this product are on the Canadian DSL list.
AICS:	On the inventory, or in compliance with the inventory
NZIoC:	Not in compliance with the inventory
ENCS:	Not in compliance with the inventory
KECI:	On the inventory, or in compliance with the inventory
PICCS:	On the inventory, or in compliance with the inventory
IECSC:	Not in compliance with the inventory

15.2 Chemical Safety Assessment: No information available.

16. Other information

Full text of R-phrases referred to under sections 2 and 3

R22	Harmful if swallowed.
R43	May cause sensitization by skin contact.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of H-Statements referred to under sections 2 and 3.

H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H373	May cause damage to organs through prolonged or repeated exposure if swallowed.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

History**Date of issue:** January 08, 2010**Date of revision:** February 05, 2011**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.