

KAESER KOMPRESSOREN	SAFETY DATA SHEET 1907/2006/EC			KAESER Reciprocating compressor oil VDL 150 9.0893.1, 9.0894.1, 9.3976.1
	OEL_D.DOT	Created by:	Created on: 20.05.2011	Modified: 10.05.2012

1. Identity of substance, preparation, and supplying company

1.1 Product trade name: KAESER Piston compressor oil VDL 150 9.0893.1, 9.0894.1, 9.3976.1

1.2 Relevant identified uses of the substance or mixture and uses advised against: Not applicable.

Usage of the substance/mixture: Cooling oil

Recommended limitations of use: Only industrial users/specialists

1.3 Supplier providing the safety data sheet

Supplier: KAESER COMPRESSORS AUSTRALIA PTY. LTD.

45 Zenith Road
Melbourne/Victoria
Dandenong South 3175

Email: msds.au@kaeser.com

Technical information: (+61) 3-9791-5999

1.4 Emergency telephone number: (+61) 3-9791-5999

Application: Cooling oil with corrosion inhibitor

2. Possible Hazards/Effects on Health

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)

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

2.2 Label elements

Classification (Regulation (EC) No. 1272/2008)

Hazard notes: H412: Harmful to aquatic life with long lasting effects

Safety Instructions

Prevention: P273 Avoid release to the environment.

Disposal: P501 Content/container to be disposed at a recognised waste disposal site

Risk-determining component(s) for labelling:

- 122-39-4 Diphenylamine

Additional marking:

EUH208 contains N-1-Naphthyl aniline. May produce an allergic reaction.

Other hazards

No data available.

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3. Composition/Information on Ingredients

3.2 Mixtures

Hazardous components

Chemical description	CAS No. /EC No. Register No.	Classification (67/548/EEC)	Classification (Regulation (EC No. 1272/2008)	Concentration [%]
N-1-Naphthyl aniline:	90-30-2 / 201-983-0 / -	Xn; R22 Xi; R43 N; R50/53	Acute toxicity 4; H301 Aquatic Acute 1; H400 Skin Sens. 1; H317 STOT RE 2; H373 Aquatic Chronic 1; H410	≥ 0,25 - < 1
Diphenylamine	122-39-4 / 204- 539-4	T; R23/24/25 R33 N; R50-R53	Acute toxicity 3; H331 Acute toxicity 3; H311 Acute toxicity 3; H301 STOT RE 2; H373 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	< 0,25

Please refer to section 16 for the full text of each R phrases shown is listed. Section 16 provides the full text of the hazard warnings shown in this section.

4. First-aid Measures

4.1 Description of first-aid measures

General instructions

No specific first-aid measures required.

Inhalation:

Remove to fresh air upon inhalation of combustion gases, decomposition products or dust. Seek medical advice if breathing remains difficult.

Skin contact:

Remove contaminated clothing and shoes. Wash with soap and plenty of water.

Eye contact:

As a precaution, rinse thoroughly with water. Remove contact lenses. Protect unaffected eye. Keep eye wide open during rinsing. Seek specialist medical advice if eye irritation persists.

Ingestion:

Rinse the mouth with water and drink plenty of water. Do not administer milk or alcoholic beverages. Never orally infuse a liquid to an unconscious person. Seek medical advice if breathing remains difficult.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: None known.

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4.3 Indication of any immediate medical attention and special treatment needed

Treatment: The physician should contact the poisons information centre to obtain specialist advice.

5. Fire-fighting Measures

5.1 Extinguishing media

Suitable extinguishing media:

Adjust the fire-fighting measures to the actual environment.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire fighting: Ensure that draining fire-fighting water cannot enter the sewage system or waterways.

5.3 Advice for firefighters

Special protective equipment for fire-fighting: Wear self-contained breathing apparatus.

Further information:

Collect contaminated extinguishing water separately – it must not escape into the sewage system. Combustion residue and contaminated water must be disposed of according to local regulations.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Personal precautions Use personal protective equipment.

6.2 Environmental measures:

Environment protection measures: Inform the appropriate authority of any spillage of product into surface water or sewage systems.

6.3 Methods and materials for containment and cleaning up

Cleaning: Wipe up with adsorbent material (e.g. cloth, fleece). For disposal, fill into suitable and sealable containers.

6.4 Reference to other sections

For protective measures, see sections 7 and 8.

7. Handling and Storage

7.1 Precautions for safe handling:

Notes on safe handling: See section 8 for personal protective equipment. Dispose of cleaning water as specified by local and national regulations.

Instructions on fire and explosion prevention Common measures for preventative fire protection.

7.2 Conditions for safe storage, including any incompatibilities:

Storage room and container requirements: Store containers tightly sealed in a dry and well ventilated room.

Other information: No decomposition under correct storage and use.

7.3 Specific applications

Specific application(s): Industrial raw material

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8. Exposure control and personal protection

8.1 Parameters to be monitored

Does not contain substances with occupational exposure limit values.

8.2 Exposure controls

Technical safety measures

Ensure that eye wash bottles and safety showers are provided close to the workstation. Effective extraction.

Personal protective equipment

Respiratory protection:

Respiratory protection with filter for organic vapours

Hand protection:

Wear protective gloves from polyvinyl alcohol or nitrile butyl rubber. The protective gloves must meet the specifications of EC Directive 89/686/EEC and the resulting standard EN 374. Prior to removing the gloves, clean with water and soap.

Eye protection:

Eyewash bottle containing pure water. Tightly sealed protective glasses.

Body protection

Impermeable protective clothing: Select the body protection according to the quantity and concentration of the hazardous substance in the workplace.

Specific hygiene measures:

Observe normal procedures for handling chemicals. Wash hands before breaks and at the end of working day.

Environmental exposure controls

General instructions

Inform the appropriate authority of any spillage of product into surface water or sewage systems.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Liquid
Colour:	Yellow
Odour:	Mild hydrocarbons
Odour threshold:	No data available.
Flash point:	264° C (Method: ASTM D92)
Ignition point:	No data available.
Lower explosion threshold:	No data available.
Upper explosion threshold:	No data available.
Flammability (solid, gaseous):	No data available.
Auto-ignition temperature:	No data available.
pH value:	No data available.
Pour point:	- 39° C
Vapour pressure:	No data available.
Density:	964 kg/m ³ (0.964 g/cm ³)
Solubility in water:	No data available.
Partition coefficient: n-Octanol/water:	No data available.
Solubility in other solvents:	No data available.
Kinematic viscosity (40 °C):	136.3 mm ² /s (cSt) (Method: ASTM D 445)

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Kinematic viscosity (100 °C): 12.6 mm²/s (cSt) (Method: ASTM D 445)
 Relative vapour density: No data available.
 Evaporation rate: No data available.

9.2 Further information

Oxidising potential: Remarks: No data available.

10. Stability and reactivity

10.1 Reactivity

Stable when stored as specified.

10.2 Chemical stability

No decomposition under correct storage and use.

10.3 Potential of dangerous reactions:

Dangerous reactions: Remarks: Stable when stored as specified. no decomposition when correctly used

10.4 Conditions to avoid:

Conditions to avoid: Exposure to humidity. Contamination.

10.5 Incompatible materials:

Substances to avoid: Strong acids and oxidation agents

10.6 Hazardous decomposition products:

Hazardous decomposition products: Carbon oxides, nitrogen oxides (NO_x).

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity:

Remarks: Not classified for lack of data.

Acute oral toxicity:

N1-Naphthyl aniline:
LD50: 1,625 mg/kg, species: rat

Diphenylamine:

LD50: > 1,500 mg/kg, species: rat

Acute inhalative toxicity:

Acute inhalative toxicity: > 20 mg/l, Method: calculation

Remarks: Not classified for lack of data.

Acute dermal toxicity:

Acute dermal toxicity: > 2,000 mg/kg, Method: calculation

Remarks: Not classified for lack of data.

Acute dermal toxicity:

N1-Naphthyl aniline:
LD50 Dermal: > 5,000 mg/kg, species: rabbit

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Diphenylamine:

LD50: > 5,000 mg/kg, species: rabbit

Caustic/irritating effects on the skin

Skin irritation:

Remarks: According to the EU criteria, the product does not cause irritations to the skin.

Skin irritation:

N1-Naphthyl aniline:

Rabbit, result: No skin irritation, method: Draize test

Diphenylamine:

Rabbit, result: No irritation to the skin.

Severe eye damage/irritation

Eye irritation

Remarks: According to the EU criteria, the product does not cause irritations to the eyes.

Eye irritation

N1-Naphthyl aniline:

rabbit, result: No eye irritation, method: OECD testing directive 405

Sensitisation of airways/skin

Sensitisation

Remarks: Not classified for lack of data.

Sensitisation

N1-Naphthyl aniline: Maximisation test, species: Guinea pig, classification: May cause sensitisation by skin contact.

Patch test, species: Human, Classification: May cause sensitisation by skin contact.

Mutagenicity:

N1-Naphthyl aniline:

Ames test, result: negative; In ovocytes of Chinese hamster (CHO), result: Negative

Genotoxicity in vivo

N1-Naphthyl aniline:

In vivo test, species: mouse, result: Negative

Mutagenicity – assessment:

Remarks: Not classified for lack of data.

Carcinogenicity – assessment:

Remarks: Not classified for lack of data.

Reproductive toxicity – assessment:

Remarks: Not classified for lack of data.

Target organ systemic toxin – singular exposure

Remarks: Not classified for lack of data.

Target organ systemic toxin – repeated exposure

Remarks: Not classified for lack of data.

Aspiration hazard

Aspiration toxicity: No classification in respect to aspiration toxicity.

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Toxicity assessment

Further information: No data available.

12. Ecological information

12.1 Toxicity

Toxicity in fish:

Remarks: No data available.

Toxicity in fish:

N1-Naphthyl aniline:

LC50: 0.44 mg/l, exposure time: 96 h, Oncorhynchus mykiss (rainbow trout), semi-static test, analytic determination: yes

Diphenylamine:

LC50: 3.79 mg/l, exposure time: 96 h, Pimephales promelas (Fathead minnow), flow-through test; LC50: > 20 mg/l, exposure time: 48 h, Leuciscus idus (orfe);

LC50: 5.1 mg/l, exposure time: 48 h, Oryzias lapites (red killi fish), LC50: 5.1 mg/l

Toxicity in daphnias and other invertebrate aquatic organisms

Remarks: No data available.

Toxicity in daphnias and other invertebrate aquatic organisms

N1-Naphthyl aniline:

EC50: 0.68 mg/l, exposure time: 48 h, Daphnia magna (freshwater flea), semi-static test, analytic determination: yes

Diphenylamine:

EC50: 2.3 mg/l, exposure time: 24 h, Daphnia magna (freshwater flea)

Toxicity in daphnias and other invertebrate aquatic organisms (chronic toxicity)

N1-Naphthyl aniline:

NOEC50: 0.02 mg/l, exposure time: 21 h, Daphnia magna (freshwater flea), analytic determination: yes

12.2 Persistence and degradability

Bio-degradability

Result: No data available.

Bio-degradability

N1-Naphthyl aniline:

Aerob. result: Tests show the product not to be easily bio-degraded. 0 %. Methods: OECD testing directive 301

12.3 Bioaccumulation potential

Bioaccumulation:

Remarks: No data available.

Bioaccumulation:

N1-Naphthyl aniline:

Cyprinus carpio (common carp), exposure time: 56 d, temperature: 25°C, concentration: 0.1 mg/l, bio concentration factor (BCF): 427 – 2.730

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12.4 Mobility in soil**Mobility**

Remarks: No data available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substance considered to be persistent, bio-accumulative or toxic (PBT).

12.6 Other adverse effects**Further ecological information:**

A threat to the environment cannot be excluded when the product is handled or disposed of improperly. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

Prevent any escape of the product into the sewage system, open water or soil. Do not contaminate open water with the chemical or packaging material. Deliver residual quantities and non-recyclable solutions to a recognised disposal company.

Waste disposal code as per AVV (German Waste List Regulation): 130206* synthetic machine, gear, and lubricating oils.

Contaminated packaging:

Empty residue. Dispose of in the same manner used for unused product. Do not reuse empty containers.

14. Transport Information

Not dangerous for conveyance under UN, IMO/IMDG, ADR/RID and IATA/ICAO.

15. Legislation**15.1 Safety, health and environmental regulations/legislation specific for the substance or compound****National regulations (Germany):****Water hazard class**1 slightly water hazardous**Accidents Ordinance 96/82/EC, issue: 2003):** The directive does not apply.**EU regulations****Candidate list of substances of very high concern for approval:**

This product does not contain any substances of very high concern (REACH regulation (EU) No. 1907/2006, article 57).

Registration status**US.TSCA:** On TSCA list.**DSL:** All components of this products are listed on the Canadian DSL list.**AICS:** Listed or meets prerequisites.

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KECI Listed or meets prerequisites.

PICCS Listed or meets prerequisites.

15.2 Chemical Safety Assessment

No data available.

16 Other Information

Complete wording of the R phrases shown in sections 2 and 3

R 22: Harmful if swallowed.

R 23/24/25: Toxic by inhalation, in contact with skin, and if swallowed.

R 33: Danger of cumulative effects

R 43: May cause sensitisation by skin contact.

R 50: Very toxic to aquatic organisms.

R 50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R 52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R 53: May cause long-term adverse effects in the aquatic environment.

Full text of hazard warnings in sections 2 and 3

H301: Toxic when swallowed.

H302: Harmful if swallowed.

H311: Toxic when contact with skin.

H317: May cause an allergic skin reaction.

H331: Toxic if inhaled

H373: May cause damage to organs through prolonged or repeated exposure if swallowed.

H400: Very toxic to aquatic organisms.

H410: Very toxic to aquatic organisms with long lasting effects.

H412: Harmful to aquatic organisms with long lasting effects

Further information:

Safety data sheet directive: Regulation 1907/2006/EC (REACH).

The information in this safety data sheet is based on current knowledge and experience and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not, therefore, be construed as a guarantee of any specific property of the product.