according to 1907/2006/EC, Article 31

Printing date 23.09.2014

Revision: 23.09.2014

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: MIDLAND AW 46 HYDRAULIC OIL

 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
Application of the substance / the mixture Hydraulic oil

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Oel-Brack AG Rupperswilerstr. 3 CH-5502 Hunzenschwil Tel.: +41 (62) 889 10 30

Further information obtainable from: info@oelbrack.ch

1.4 Emergency telephone number:

Swiss Toxicological Information Centre (Tox) +41 (0)44 251 5151

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 The product is not classified according to the CLP regulation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. *Information concerning particular hazards for human and environment:*

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

Additional information: Observe the general safety regulations when handling chemicals.

2.2 Label elements Labelling according to Regulation (EC) No 1272/2008 Void Hazard pictograms Void Signal word Void Hazard statements Void Precautionary statements

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards No further relevant information available.

Results of PBT and vPvB assessment

PBT: No further relevant information available.

vPvB: No further relevant information available.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterization:

Description: Mixture of substances listed below with nonhazardous additions.

(Contd. on page 2)

according to 1907/2006/EC, Article 31

Printing date 23.09.2014

Revision: 23.09.2014

Trade name: MIDLAND AW 46 HYDRAULIC OIL

	(0	Contd. of page 1)
Dangerous compon	ients:	
CAS: 92623-72-8	Amines, C12-14-tert-alkyl, C8-20-alkyl phosphates	0,1-1%
EINECS: 296-404-1	¥ N R51/53	
	Aquatic Chronic 2, H411	
CAS: 128-39-2	2,6-di-tert-butylphenol	0,1-1%
EINECS: 204-884-0	🗙 Xi R38; 🌄 N R50/53	
	Aquatic Acute 1, H400; Aquatic Chronic 1, H410; 🚸 Skin Irrit. 2, H315	
Additional informati	ion: For the wording of the listed risk phrases refer to section 16.	

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: Immediately remove any clothing soiled by the product. **After inhalation:** Move individual to fresh air, seek medical advice.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor. **After swallowing:** Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

5.3 Advice for firefighters

Protective equipment:

Mouth respiratory protective device. Wear fully protective suit. Additional information Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:

Do not allow product to reach sewage system or any water course. Prevent from spreading (e.g. by damming-in or oil barriers).

(Contd. on page 3)

- CHE -

according to 1907/2006/EC, Article 31

Revision: 23.09.2014

(Contd. of page 2)

Trade name: MIDLAND AW 46 HYDRAULIC OIL

Inform respective authorities in case of seepage into water course or sewage system.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols. Information about fire - and explosion protection:

Information about fire - and explosion protection

Keep ignition sources away - Do not smoke. Protect from heat.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles: Keep container in a well-ventilated place. Information about storage in one common storage facility: Not required. Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles. Storage class: 10

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

- Maximum workplace concentration for mineral oil mist with boiling point > 350 $^{\circ}$ C (SUVA, Switzerland): 0.2 mg/ m³

- Recommended maximum workplace concentration for mineral oil mist / aerosol (ACGIH, USA): 5 mg/m³ (inhalable fraction)

128-3	128-39-2 2,6-di-tert-butylphenol (0,1-1%)			
MAK ((Germany)	vgl.Abschn.IIb		
122-3	122-39-4 diphenylamine (≤ 0,1%)			
MAK ((Switzerland)	Long-term value: 10 e mg/m³ H SSc;		
AGW	(Germany)	Long-term value: 5 E mg/m³ 2 (II);DFG, Y, H		
Additional information: The lists valid during the making were used as basis.				
8.2 Exposure controls Personal protective equipment: <i>General protective and hygienic measures:</i>				

Ensure good ventilation/exhaustion at the workplace.

Immediately remove all soiled and contaminated clothing

(Contd. on page 4)

CHE -

according to 1907/2006/EC, Article 31

(Contd. of page 3)

Trade name: MIDLAND AW 46 HYDRAULIC OIL

Wash hands before breaks and at the end of work.

Respiratory protection: Use suitable respiratory protective device only when aerosol or mist is formed.

Protection of hands: Protective gloves and protective skin cream

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Goggles recommended during refilling

Limitation and supervision of exposure into the environment

Do not allow to enter sewers/ surface or ground water.

SECTION 9: Physical and chemical properties

General Information		
Appearance:		
Form:	Fluid	
Colour:	Amber coloured	
Odour:	Mineral-oil-like	
Odour threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition		
Melting point/Melting range:	Not determined.	
Boiling point/Boiling range:	Not determined.	
Flash point:	210 ℃	
Flammability (solid, gaseous):	Not applicable.	
Ignition temperature:	Not determined.	
Decomposition temperature:	Not determined.	
Self-igniting:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Oxidising properties	Not determined.	
Vapour pressure:	Not determined.	
Density at 15 ℃:	0,857 g/cm³	
Relative density	Not determined.	
Vapour density	Not determined.	

according to 1907/2006/EC, Article 31

Revision: 23.09.2014

Trade name: MIDLAND AW 46 HYDRAULIC OIL

		(Contd. of page 4)
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
water:	Practically insoluble.	
Partition coefficient (n-octanol/	water): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic at 40 °C:	46 mm²/s (DIN 51562)	
	100 °C: 7.1 mm²/s (DIN 51562)	
9.2 Other information	Pour point: -27 °C	

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability No decomposition if used according to specifications. **Thermal decomposition** / **conditions to be avoided:** No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions No dangerous reactions known.

10.4 Conditions to avoid: Heat.

10.5 Incompatible materials: Oxidizing agents.

10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

11.1 Information on toxicological effects Acute toxicity Not applicable. *Primary irritant effect: on the skin:* No irritating effect. *on the eye:* No irritating effect. *Sensitisation:* No sensitising effects known.

Additional toxicological information: No further relevant information available. *Repeated dose toxicity* No further relevant information available. *CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)* No further relevant information available.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: Based on the ingredients product is not classified as harmful for the environment.

12.2 Persistence and degradability Not easily biodegradable.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

(Contd. on page 6)

CHE

according to 1907/2006/EC, Article 31

Printing date 23.09.2014

Revision: 23.09.2014

Trade name: MIDLAND AW 46 HYDRAULIC OIL

(Contd. of page 5)

12.5 Results of PBT and vPvB assessment

PBT: No further relevant information available. **vPvB:** No further relevant information available.

12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation: Disposal must be made according to official regulations.

Uncleaned packaging

Recommendation: Disposal must be made according to official regulations. **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

14.1 UN-Number ADR, ADN, IMDG, IATA	Void
14.2 UN proper shipping name ADR, ADN, IMDG, IATA	Void
14.3 Transport hazard class(es)	
ADR, ADN, IMDG, IATA <i>Class</i>	Void
14.4 Packing group ADR, IMDG, IATA	Void
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user	Not applicable.
14.7 Transport in bulk according to An MARPOL73/78 and the IBC Code	nex II of Not applicable.
Transport/Additional information:	
ADR Remarks:	Not classified.
IMDG Remarks:	Not classified
IATA Remarks:	Not classified
UN "Model Regulation":	-

(Contd. on page 7)

according to 1907/2006/EC, Article 31

Trade name: MIDLAND AW 46 HYDRAULIC OIL

(Contd. of page 6)

СНЕ

SECTION 15: Regulatory information

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

National regulations:

Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous to water.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

The data and information given in this safety data sheet are based on the current state of our knowledge at the publishing date indicated in this safety data sheet. The safety data sheet shall give you indications for the safe handling, storage and use of the mentioned product, however the information included herein is not intended to be all-inclusive. The data and information can not be transferred to other products or other uses as the one declared in this safety data sheet. The data and information in this safety data sheet describe the safety requirements, but they do not represent any product specifications.

Relevant phrases

H315 Causes skin irritation.

- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.

R38 Irritating to skin.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2 Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1 Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2