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

1.1 Product identifier:	AUTOL Hydrauliköl HLP-D (series)
1.2 Relevant identified uses of the substance or mixture and uses advised against:	
Use of the substance/mixture:	Hydraulic fluid
Uses advised against:	No uses known
1.3 Details of the supplier of the safety data sheet:	Eni Schmiertechnik GmbH Paradiesstr. 14, 97080 Würzburg Tel. (+ 49) 931 - 900 98-0 Fax (+ 49) 931-98442
Advising/Support:	Technical Department, Tel. (+49) 931 900 98-145 technik.wuerzburg@agip.de http://www.enischmiertechnik-datenblaetter.de

Section 2. Hazards identification.

2.1 Classification of the substance or mixture:	The mixture is not classified as hazardous according to Directive 1999/45/EC.
GHS classification:	This mixture is not classified as hazardous according to Regulation (EC) No. 1272/2008.
2.2 Label elements:	
Special labelling of certain mixtures:	EUH208 – Contains Sulfonic acids, petroleum, calcium salts. May produce an allergic reaction. EUH210 – Safety data sheet available on request.
2.3 Other hazards:	Product can build up a film on the water surface which can inhibit the oxygen exchange. See also sections 11, 12 and 15.

Section 3. Composition/information on ingredients.

3.2 Mixtures:	
Chemical characterization:	Additive, mineral oil
	All concentrations are quoted as mass percentages for liquids and volume percentages for gases. Other substances which are not classified as dangerous are contained up to 100%. This mixture does not contain any substance classified as dangerous, whose concentration exceeds the concentration limits described in article 3.2.2 (Annex II, VO 1907/2006/EU).

Section 4. First aid measures.

4.1 Description of the first aid measures:	
General information:	In all cases of doubt, or when symptoms persist, seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps.
After inhalation:	Remove casualty to fresh air and keep warm and at rest. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
After skin contact:	After contact with skin, wash immediately with plenty of water and soap. Remove contaminated clothing immediately and dispose of safely. In case of skin irritation, seek medical treatment.
After contact with eyes:	In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.
After ingestion:	Do NOT induce vomiting. Call a physician immediately. Aspiration hazard.
4.2 Most important symptoms and effects, both acute and delayed:	No data available.
4.3 Indication of any immediate medical attention and special treatment needed:	No data available.

Section 5. Fire fighting measures.

5.1 Extinguishing media:

Suitable extinguishing media:	Carbon dioxide (CO_2), foam, dry extinguishing powder. Use water spray jet to protect personnel and to cool endangered containers.
Unsuitable extinguishing media:	Water
5.2 Special hazards arising from the substance or mixture:	The formation of combustible vapours is possible at temperatures above: Flashpoint. Hot product may produce flammable vapours.
Can be released in case of fire:	Pyrolysis products, toxic; hydrocarbons, carbon dioxide, carbon monoxide, hydrogen sulphide (H_2S), nitrogen oxides (NOx), phosphorus oxides, smoke.
5.3 Advice for fire fighters:	In case of fire: Wear self-contained breathing apparatus. Full protective suit. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
Additional information:	B: burning liquid or melting substances

Section 6. Accidental release measures.

6.1 Personal precautions, protective equipment and emergency procedures:	Provide adequate ventilation as well as local exhaustion at critical locations. Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Conditions to avoid: Inhalation. Do not put any product impregnated cleaning rags into your trouser pockets. High slip hazard because of leaking or spilled product.
6.2 Environmental precautions:	Prevent spread over a wide area (e. g. by containment or oil barriers). Do not empty into drains. If product enters soil, it will be mobile and may contaminate groundwater.
6.3 Methods and material for containment and cleaning up:	Absorb with liquid-binding material (e. g. sand, diatomaceous earth, acid or universal binding agents). Treat recovered material as prescribed in the section on waste disposal.
6.4 Reference to other sections:	See section 8 and 13.

Section 7. Handling and storage.

7.1 Precautions for safe handling:

Advice on safe handling:	See section 6.1. Avoid contact with skin and eyes. Keep away from sources of ignition. No smoking. Wash hands before breaks and after work. All work processes must always be designed so that the following is excluded: Generation/formation of mist.
Advice on protection against fire and explosion:	Take precautionary measures against static discharge.
Further information on handling:	Do not put any product impregnated cleaning rags into your trouser pockets. The formation of combustible vapours is possible at temperatures above: Flashpoint.

7.2 Conditions for safe storage, including any incompatibilities:

Requirements for storage rooms and vessels:	Keep/store only in original container.
Advice on storage compatibility:	Do not store together with: Spontaneous combustion.
Further information on storage conditions:	Protect from moisture. Keep in a cool place. Keep only in the original container at temperatures not exceeding 50°C.
7.3 Specific end use(s):	Observe technical data sheet.

Section 8. Exposure controls/personal protection.

8.1 Control parameters:

8.2 Exposure controls:

Appropriate engineering controls:	Provide adequate ventilation as well as local exhaustion at critical locations.
Protective and hygiene measures:	Take off immediately all contaminated clothing. Wash hands before breaks and after work. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside.
Eye protection:	Tightly sealed safety glasses. German Industry Norms (DIN)/European Norms (EN): Din EN 166.

Hand protection:	Examples of suitable protective gloves from the company KCL GmbH, Eichenzell with the following specification (test according to EN 374): In full contact/splash contact: Camatril (item no. 731; material: nitrile, minimum coat thickness: 0,33 mm, breakthrough time: 480 min.) Dermatril (item no. 740; material: nitrile, minimum coat thickness: 0,11 mm, breakthrough time: 30 min.) The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the resultant standard EN 374. The breakthrough times stated above are based on laboratory measurements of KCL to EN 374 and are only authoritative for the recommended glove types. Protect skin by using skin protective cream.
Skin protection:	The type of personal protection equipment has to be chosen based on the concentration and amount of the dangerous substance at the workplace. For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes). Chemical resistant safety shoes, with lead protection cap. German Industry Norms (DIN)/European Norms (EN): DIN EN 344.
Respiratory protection:	With correct and proper use, and under normal conditions, breathing protection is not required. Generation/formation of mist: Filtering device with filter or ventilator filtering device of type: A-P2.
Environmental exposure controls:	Technical measures to prevent exposure. Organisation measures to prevent exposure.

Section 9. Physical and chemical properties.

9.1 Information on basic physical and chemical properties:

Physical state:	Liquid
Colour:	Yellow, brown
Odour:	Characteristic
Changes in the physical state:	
Initial boiling point/boiling range:	> 320°C
Flashpoint:	HLP-D 32: > 220°C (DIN ISO 2592) HLP-D 46: > 220°C (DIN ISO 2592)
Lower explosion limits:	0,6 Vol.%
Upper explosion limits:	6,5 Vol.%
Ignition temperature:	> 250°C (ASTM E 659)
Density at 15°C:	0,860 – 0,866 g/cm² (DIN 53217)
Solubility in other solvents:	Insoluble in water
Kin. Viscosity at 40°C:	31,8 – 45,0 mm²/s (DIN 51562)
9.2 Other information:	No data available

Section 10. Stability and reactivity.

10.1 Reactivity:	See section 9.
10.2 Chemical stability:	If product is stored and handled as prescribed it is stable.
10.3 Possibility of hazardous reactions:	The formation of combustible vapours is possible at temperatures above: Flashpoint.
10.4 Conditions to avoid:	Oxidizing agents, strong.
10.5 Incompatible materials:	No data available.
10.6 Hazardous decomposition products:	See section 5.3.

Section 11. Toxicological information.

11.1 Information on toxicological effects:

Toxicocinetics, metabolism and distribution:	There are no data available on the preparation/mixture itself.

Acute toxicity:	Classification: None The classification was carried out according to the calculation method of the regulation (EC) 1272/2008 [CLP].
Irritation and corrosivity:	Classification: None The classification was carried out according to the calculation method of the regulation (EC) 1272/2008 [CLP].
Sensitising effects:	Classification: None Frequently or prolonged contact with skin may cause dermal irritation.
Severe effects after repeated or prolonged exposure:	Classification: None The classification was carried out according to the calculation method of the regulation (EC) 1272/2008 [CLP].
Carcinogenic/mutagenic/toxic effects for reproduction:	The substance does not meet the criteria for classification as CMR category 1A or 1B according to CLP.
Specific effects in experiment on an animal:	There are no data available on the preparation/mixture itself.
Additional information on tests:	Frequently or prolonged contact with skin may cause dermal irritation.

Section 12. Ecological information.

12.1 Toxicity:	There are no data available on the preparation/mixture itself. Classification: None The classification was carried out according to the calculation method of the regulation (EC) 1272/2008 [CLP].
12.2 Persistence and degradability:	Not easily biodegradable (according to OECD criteria). Product is not easily biodegradable (data apply to the main component).
12.3 Bioaccumulative potential:	There are no data available on the preparation/mixture itself.
12. 4 Mobility in soil:	There are no data available on the preparation/mixture itself.
12.5 Results of PBE and vPvB assessment:	The components in this formulation do not meet the criteria for classification as PBT or vPvB.
12.6 Other adverse effects:	Effects in sewage plants: Mechanical separation in a suitable sewage plant is possible.

Section 13. Disposal considerations.

13.1 Waste treatment methods:

Advice on disposal:	Dispose of waste according to “Kreislaufwirtschafts- und Abfallgesetz (KrW-/AbfG)”. Observe mixture permissions according to “Altölverordnung (Waste oil Directive)”. Waste disposal according to EC Directives 75/442/EEC and 91/689/EEC on waste and hazardous waste in their latest versions. According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.
Waste disposal number of waste from residues/unused products:	13 01 10 – oil wastes and wastes of liquid fuels (except edible oils, and those in chapters 05, 12 and 19); waste hydraulic oils; mineral based non-chlorinated hydraulic oils Classified as hazardous waste.
Waste disposal number of used product:	13 01 10 – oil wastes and wastes of liquid fuels (except edible oils, and those in chapters 05, 12 and 19); waste hydraulic oils; mineral based non-chlorinated hydraulic oils Classified as hazardous waste.
Waste disposal number contaminated packaging:	13 01 10 – oil wastes and wastes of liquid fuels (except edible oils, and those in chapters 05, 12 and 19); waste hydraulic oils; mineral based non-chlorinated hydraulic oils Classified as hazardous waste.
Contaminated packaging:	Dispose of waste according to applicable legislation. Non contaminated packages may be recycled. Packing which cannot be properly cleaned must be disposed of.

Section 14. Transport information.

Other applicable information:	No dangerous good in sense of these transport regulations.

Section 15. Regulatory information.

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

National Regulations:

Water hazardous class:	1 – slightly water contaminating
15.2 Chemical safety assessment:	Chemical safety assessments for substances in this mixture were not carried out.

Section 16. Other information.

The information contained in this safety data sheet is based on our current information level. It does not give assurance for certain product properties and does not establish a contractual relationship. This information relates only to the specific material and may not be valid if the material is used in combination with any other material or in any process.

Changes: 3, 9