Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of the substance or preparation

DIESEL SYNTHOIL 5W40 1L
Art.:1340

Use of the substance/preparation
Motor oil

Company/undertaking identification
LIQUI MOLY GmbH, Jerg-Wieland-Straße 4, D-89081 Ulm-Lehr
Telephone (+49) 0731-1420-0, Fax (+49) 0731-1420-88

E-mail address of the competent person: info@chemical-check.de, k.schnurbusch@chemical-check.de

Emergency telephone
Advisory office in case of poisoning:
Tel.:

Telephone number of the company in case of emergencies:
Tel. (+49) 0731-1420-0

2. HAZARDS IDENTIFICATION

Preparation is not classified as hazardous in the sense of directive 1999/45/EC.

To people
See point 11 and 15.
Not applicable

To the environment
See point 12.
Product can compose a film on the water surface, which can prevent oxygen exchange.
Hazardous to drinking water, on escape of even small quantities.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name			
content %	**Symbol**	**R-phrases**	**EINECS, ELINCS**
	Registration number (ECHA)		
Polyolefin polyamine succinimide, Polyol			
1 - 5		53	
Phenol, 2,2'-Polythiobis[4-C8-30-alkyl derivative, over-alkaline calcium salts			
1 - 5	---	53	291-829-9
Zinc alkyl dithiophosphate			
1 -< 2,5	Xi/N	41-51-53	272-028-3

For complete wording of the R-phrases, refer to point 16.

4. FIRST AID MEASURES

4.1 Inhalation

Remove person from danger area.
Supply person with fresh air and consult doctor according to symptoms.

4.2 Eye contact

Remove contact lenses.
Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

4.3 Skin contact

Wash thoroughly with soap and copious water - remove contaminated clothing immediately. If skin irritation occurs (redness etc.), consult doctor.

4.4 Ingestion

Rinse the mouth thoroughly with water.
Do not induce vomiting. Consult doctor immediately.

4.5 Special resources necessary for first aid

n.c.

5. FIRE-FIGHTING MEASURES

5.1 Suitable extinguishing media

CO2
Foam
Dry extinguisher
Cool container at risk with water.

5.2 Extinguishing media which shall not be used for safety reasons

High volume water jet

5.3 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

In case of fire the following can develop:
Oxides of carbon
H2S
Oxides of nitrogen
Oxides of phosphorus
Oxides of sulphur
Toxic pyrolysis products.
Flammable vapour/air mixtures
Hot product gives off combustible vapours.

5.4 Special protective equipment for fire-fighters

In case of fire and/or explosion do not breathe fumes.
Protective respirator with independent air supply.
According to size of fire
Full protection, if necessary

5.5 Further information

Dispose of contaminated extinction water according to official regulations.

6. ACCIDENTAL RELEASE MEASURES

Refer to point 13. and for personal protection refer to point 8.

6.1 Personal precautions

Ensure sufficient supply of air.
Avoid formation of oil mist.
Avoid contact with eyes or skin.
If applicable, caution - risk of slipping

6.2 Environmental precautions

If leakage occurs, dam up.
Prevent from entering drainage system.
Prevent surface and ground-water infiltration, as well as ground penetration.
If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods for cleaning up

Collect using absorbant material (e.g. Universal binding medium), and dispose of according to point 13.
Oil binder
Do not wash away with water or watery cleaning agents.

7. HANDLING AND STORAGE

7.1 Handling

Tips for safe handling:

See point 6.1
Avoid formation of oil mist.
Ensure good ventilation.
Keep away from sources of ignition - Do not smoke.
Do not heat to temperatures close to flash point.
Take measures against electrostatic charging, if appropriate.
Avoid contact with eyes.
Avoid long lasting or intensive contact with skin.
Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.
Do not carry cleaning cloths soaked in product in trouser pockets.
Observe directions on label and instructions for use.

7.2. Storage

Requirements for storage rooms and containers:

Not to be stored in gangways or stair wells.
Store product closed and only in original packing.
Impermeable floor.

Special storage conditions:

See point 10
Protect against moisture and store closed.
Protect from direct sunlight and warming.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure limit values

GB **Chemical Name**	Oil mist, mineral	Content %:
WEL-TWA: 5 mg/m3 (ACGIH)	WEL-STEL: 10 mg/m3 (ACGIH)	---
BMGV: ---	Other information: ---	

GB WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit - Short-terme exposure limit (15-minute reference period). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.
** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

8.2 Exposure controls

8.2.1 Occupational exposure controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.
If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.
Applies only if maximum permissible exposure values are listed here.
General hygiene measures for the handling of chemicals are applicable.
Wash hands before breaks and at end of work.
Keep away from food, drink and animal feedingstuffs.
Respiratory protection:
Normally not necessary.
With oil mist formation:
Filter A2 P2 (EN 14387)
Observe wearing time limitations for respiratory protection equipment.
Hand protection:
Protective gloves, oil resistant (EN 374)
If applicable

Protective nitrile gloves (EN 374)
Protective Neopren gloves (EN 374).
Protective hand cream recommended.
Eye protection:
Tight fitting protective goggles with side protection (EN 166).
Skin protection:
Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments)

Additional information on hand protection - No tests have been performed.
Selection made for preparations according to the best available knowledge and information on the ingredients.
Selection of materials derived from glove manufacturer's indications.
Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.
Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.
In the case of preparations the resistance of glove materials cannot be calculated in advance so it has to be tested before use. The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.2 Environmental exposure controls

n.av.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Colour:	Brown
Odour:	Characteristic
10 % pH-value:	n.av.
Boiling point/boiling range (°C):	n.av.
Melting point/melting range (°C):	- 45
Flash point (°C):	230
Autoflammability:	n.c.
Minimum limit of explosion:	n.a.
Maximum limit of explosion:	n.a.
Vapour pressure:	n.c.
Density (g/ml):	0,850
Water solubility:	Insoluble
Viscosity:	92 mm²/s (40°C), 14,8 mm²/s (100°C)

10. STABILITY AND REACTIVITY

Conditions to avoid

See point 7
Stable when handled and stored correctly.
Protect from humidity.
Heating, open flame, ignition sources

Materials to avoid

See point 7
Avoid contact with strong oxidizing agents.
Avoid contact with strong acids.

Hazardous decomposition products

See point 5.3
No decomposition when used as directed.

11. TOXICOLOGICAL INFORMATION

Acute toxicity and immediate effects

Ingestion, LD50 rat oral (mg/kg):	n.av.
Inhalation, LC50 rat inhal.(mg/l/4h):	n.av.
Skin contact, LD50 rat dermal (mg/kg):	n.av.
Eye contact:	n.av.

Delayed and chronic effects

Sensitization:	n.c.

Carcinogenicity:	n.c.
Mutagenicity:	n.c.
Reproductive toxicity:	n.c.
Narcosis:	n.c.

Further information

Classification according to calculation procedure.
The following may occur:
Drying of the skin.
Dermatitis (skin inflammation)
Allergic reaction possible.
On vapour formation:
Irritation of the respiratory tract
Ingestion:
Gastrointestinal disturbances
Nausea
Vomiting

12. ECOLOGICAL INFORMATION

Water hazard class (Germany):	2
Self classification:	Yes (VwVwS)
Persistence and degradability:	
Not readily biodegradable	
Behaviour in sewage plants:	Isolate as much as possible with an oil separator.
Aquatic toxicity:	n.av.
Ecological toxicity:	n.av.
Accumulation:	
Concentration in organisms possible.	

13. DISPOSAL CONSIDERATIONS

13.1. for the material / preparation / residue

Soaked polluted cloths, paper or other organic materials represent a fire hazard and should be controlled, collected and disposed of.
EC disposal code no.:
The waste codes are recommendations based on the scheduled use of this product.
Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2001/118/EC, 2001/119/EC, 2001/573/EC)
13 02 05 mineral-based non-chlorinated engine, gear and lubricating oils
Recommendation:
Pay attention to local and national official regulations
Implement substance recycling.
E.g. suitable incineration plant.

13.2 for contaminated packing material

See point 13.1
Pay attention to local and national official regulations
15 01 01 paper and cardboard packaging
15 01 02 plastic packaging
15 01 04 metallic packaging
Empty container completely.
Uncontaminated packaging can be recycled.
Dispose of packaging that cannot be cleaned in the same manner as the substance.

14. TRANSPORT INFORMATION

General statements

UN-Number:	n.a.

Road/Rail-transport (ADR/RID)

Class/packing group:	n.a.
Classification code:	n.a.
LQ:	n.a.
Tunnel restriction code:	

Transport by sea

IMDG-code: n.a. (class/packing group)
Marine Pollutant: n.a

Transport by air

IATA: n.a. (class/secondary danger/packing group)

Additional information:

Non-dangerous material according to Transport Regulations.

15. REGULATORY INFORMATION

Classification according to Dangerous Product Regulations incl. EC Directives (67/548/EEC and 1999/45/EC)

Symbols: Not applicable
Indications of danger: ---
R-phrases:

S-phrases:

Additions:
Contains
long-chained alkylated calcium aryl sulfonate
May produce an allergic reaction.
Safety data sheet available for professional user on request.
Observe restrictions: n.a.
VOC (1999/13/EC):
n.a.

16. OTHER INFORMATION

These details refer to the product as it is delivered.
Storage class VCI (Germany): 10
Revised points: 2, 3, 4, 5, 6, 7, 11, 12, 15
The following phrases represent the prescribed R-phrases / H-phrases (GHS) for the ingredients (designated in point 3).
53 May cause long-term adverse effects in the aquatic environment.
41 Risk of serious damage to eyes.
51 Toxic to aquatic organisms.

Legend:

n.a. = not applicable / n.v., k.D.v. = n.av. = not available / n.g. = n.c. = not checked
WEL = Workplace Exposure Limit EH40, TWA = Long-term exposure limit (8-hour TWA (= time weighted average) reference period), STEL = Short-terme exposure limit (15-minute reference period) / BMGV = Biological monitoring guidance value EH40
AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany) / BGW = "Biologischer Grenzwert" (biological limit value, Germany)
VbF = Regulations for flammable liquids (Austria)
WGK = water hazard class (Germany) - WGK 3 = very hazardous, WGK 2 = hazardous, WGK 1 = slightly hazardous to water
VOC = Volatile organic compounds / AOX = Adsorbable organic halogen compounds
VwVwS = Administrative Order relating to substances hazardous to water (Germany)
The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.
No responsibility.
These statements were made by:

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