

FAG Arcanol LOAD150

Safety Data Sheet 1907/2006/EC - REACH (GB)

Date printed 19.03.2018, Revision 19.03.2018
Version 06. Supersedes version: 05

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

1.1 Product identifier

FAG Arcanol LOAD150

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

1.2.1 Relevant uses

Lubricant

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company

Schaeffler Technologies AG & Co. KG
Georg-Schäfer-Str. 30
97421 Schweinfurt / GERMANY
Phone +49 (0)9721 91 - 0
Fax +49 (0)9721 91 - 3809
Homepage www.schaeffler.com

Address enquiries to

Technical information

michael.fassbinder@schaeffler.com

Safety Data Sheet

sdb@chemiebuero.de

1.4 Emergency telephone number

Advisory body

+49 (0)89-19240 (24h) (english)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]

Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects.

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2.2 Label elements

The product is required to be labelled in accordance with regulation (EC) No 1272/2008 (CLP).

| | |
|---------------------------------|---|
| Hazard pictograms | none |
| Signal word | none |
| Hazard statements | H412 Harmful to aquatic life with long lasting effects. |
| Precautionary statements | P273 Avoid release to the environment. |

2.3 Other hazards

| | |
|---------------------------------|--|
| Physico-chemical hazards | Combustible. |
| Human health dangers | High Pressure Applications. Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. |
| Environmental hazards | Does not contain any PBT or vPvB substances. |
| Other hazards | Further hazards were not determined with the current level of knowledge. |

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SECTION 3: Composition / Information on ingredients

Product-type:

The product is a mixture.

| Range [%] | Substance |
|-----------|---|
| < 3 | 2,2,4-Trimethyl-1,2-dihydroquinoline, polymerizate |
| | CAS: 26780-96-1 |
| | GHS/CLP: Aquatic Chronic 3: H412 |
| < 3 | Alkyl thiadiazole |
| | CAS: 91648-65-6, EINECS/ELINCS: 293-927-7, Reg-No.: 01-2119976351-35 |
| | GHS/CLP: Aquatic Chronic 3: H412 |
| < 2,4 | Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts |
| | CAS: 68457-79-4, EINECS/ELINCS: 270-608-0 |
| | GHS/CLP: Skin Irrit. 2: H315 - Eye Dam. 1: H318 - Aquatic Chronic 2: H411 |
| < 2,4 | Zinc naphthenate |
| | CAS: 84418-50-8, EINECS/ELINCS: 282-762-6 |
| | GHS/CLP: Aquatic Chronic 3: H412 |
| < 2,4 | Naphthenic acids, zinc salts |
| | CAS: 12001-85-3, EINECS/ELINCS: 234-409-2 |
| | GHS/CLP: Aquatic Chronic 2: H411 |

Comment on component parts

Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.

For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Change soaked clothing.

Inhalation

Ensure supply of fresh air.
In the event of symptoms seek medical treatment.

Skin contact

When in contact with the skin, clean with soap and water.
Consult a doctor if skin irritation persists.

Eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

Ingestion

Seek medical advice immediately.
Do not induce vomiting.

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4.2 Most important symptoms and effects, both acute and delayed

None known.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.
Forward this sheet to the doctor.
Note: High Pressure Applications
Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discoloured and extremely painful with extensive subcutaneous necrosis. Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimise tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing Foam.
Dry powder.
Water spray jet.
Carbon dioxide.

Extinguishing media that must not be used Full water jet.

5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.

5.3 Advice for firefighters

Use self-contained breathing apparatus.
Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

High risk of slipping due to leakage/spillage of product.
Forms slippery surfaces with water.

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6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.
Prevent spread over a wide area (e.g. by containment or oil barriers).

6.3 Methods and material for containment and cleaning up

Take up mechanically.
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only in well-ventilated areas.
No special measures necessary if used correctly.
The product is combustible.
Wash hands before breaks and after work.
Use barrier skin cream.
Cloths contaminated with product should not be kept in trouser pockets.
Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.
Do not store together with oxidizing agents.
Keep container tightly closed.
Keep away from frost.
Keep in a cool place. Store in a dry place.

7.3 Specific end use(s)

See product use, SECTION 1.2

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SECTION 8: Exposure controls / personal protection

8.1 Control parameters

**Ingredients with
occupational exposure
limits to be monitored (GB)**

not applicable

DNEL

| |
|---|
| Substance |
| Alkyl thiadiazole, CAS: 91648-65-6 |
| Industrial, dermal, Long-term - systemic effects: 6.25 mg/kg bw/d (AF=200). |
| Industrial, inhalative, Long-term - systemic effects: 4.408 mg/m ³ (AF=50). |
| general population, inhalative, Long-term - systemic effects: 1.087 mg/m ³ (AF=100). |
| general population, dermal, Long-term - systemic effects: 3.125 mg/kg bw/d (AF=400). |

PNEC

| |
|--|
| Substance |
| Alkyl thiadiazole, CAS: 91648-65-6 |
| oral (food), 6,67 mg/kg food (AF=300). |
| soil, 308,96 mg/kg dw. |
| sediment (seaater), 38,06 mg/kg dw. |
| sediment (freshwater), 380,62 mg/kg dw. |
| sewage treatment plants (STP), 8000 mg/l (AF=1). |
| seawater, 0,004 mg/l (AF=10000). |
| freshwater, 0,041 mg/l (AF=1000). |

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8.2 Exposure controls

| | |
|--|--|
| Additional advice on system design | Ensure adequate ventilation on workstation. General exposure limit for oil mist should be noted. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances. |
| Eye protection | If there is a risk of splashing: Safety glasses. (EN 166:2001) |
| Hand protection | The details concerned are recommendations. Please contact the glove supplier for further information. > 0,5 mm; Butyl rubber, >120 min (EN 374-1/-2/-3). |
| Skin protection | not applicable |
| Other | Avoid contact with eyes and skin. |
| Respiratory protection | Breathing apparatus in the event of aerosol or mist formation. Short term: filter apparatus, combination filter A-P1. (DIN EN 14387) |
| Thermal hazards | not applicable |
| Delimitation and monitoring of the environmental exposition | Comply with applicable environmental regulations limiting discharge to air, water and soil. |

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|---|---------------------------------------|
| Form | pasty |
| Color | red |
| Odor | characteristic |
| Odour threshold | not applicable |
| pH-value | not applicable |
| pH-value [1%] | not applicable |
| Boiling point [°C] | No information available. |
| Flash point [°C] | > 200 (392°F) |
| Flammability (solid, gas) [°C] | No information available. |
| Lower explosion limit | ~ 1 Vol.% |
| Upper explosion limit | ~ 10 Vol.% |
| Oxidising properties | no |
| Vapour pressure/gas pressure [kPa] | < 0,0005 (20°C, 68°F) |
| Density [g/ml] | ca. 0,9 (DIN 51757) (15 °C / 59,0 °F) |
| Bulk density [kg/m ³] | not applicable |
| Solubility in water | virtually insoluble |
| Partition coefficient [n-octanol/water] | > 6 |
| Viscosity | not applicable |
| Relative vapour density determined in air | > 1 |
| Evaporation speed | not applicable |
| Melting point [°C] | > 240 (464°F) |
| Autoignition temperature [°C] | > 320 (608°F) |
| Decomposition temperature [°C] | No information available. |

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

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10.3 Possibility of hazardous reactions

Reactions with oxidizing agents.

If product is heated above decomposition temperature toxic vapours may be released.

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

Strong oxidizing agent.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

| Product |
|--|
| LD50, dermal, Rabbit: > 5000 mg/kg bw. |
| LD50, oral, Rat: > 5000 mg/kg bw. |
| Substance |
| 2,2,4-Trimethyl-1,2-dihydroxiquinoline, polymerizate, CAS: 26780-96-1 |
| LD50, dermal, Rabbit: > 5010 mg/kg. |
| LD50, oral, Rat: 2225 mg/kg. |
| Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts, CAS: 68457-79-4 |
| LD50, dermal, Rat: 20000 mg/kg. |
| LD50, oral, Rat: 3600 mg/kg. |
| Alkyl thiazazole, CAS: 91648-65-6 |
| LD50, oral, Rat (female): 6176 mg/kg bw. |

Serious eye damage/irritation

Slight irritant effect.
Based on the available information, the classification criteria are not fulfilled.

Skin corrosion/irritation

Slight irritant effect.
Based on the available information, the classification criteria are not fulfilled.

Respiratory or skin sensitisation

No sensitizing effects known.
Based on the available information, the classification criteria are not fulfilled.

Specific target organ toxicity — single exposure

Based on the available information, the classification criteria are not fulfilled.

Specific target organ toxicity — repeated exposure

Based on the available information, the classification criteria are not fulfilled.

Mutagenicity

No mutagenous properties.
Based on the available information, the classification criteria are not fulfilled.

Reproduction toxicity

No reprotoxic properties known.
Based on the available information, the classification criteria are not fulfilled.

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Carcinogenicity No cancerogenic properties known
Based on the available information, the classification criteria are not fulfilled.

Aspiration hazard Based on the available information, the classification criteria are not fulfilled.

General remarks
Toxicological data of complete product are not available.
The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists.

SECTION 12: Ecological information

12.1 Toxicity

| Product |
|-------------------------------------|
| LL50, Daphnia magna: 10 - 100 mg/l. |
| LL50, fish: 10 - 100 mg/l. |

| Substance |
|--|
| 2,2,4-Trimethyl-1,2-dihydroxiquinoline, polymerizate, CAS: 26780-96-1 |
| LC50, (96h), Lepomis macrochirus: 54 mg/l. |
| EC50, (48h), Daphnia magna: 5,8 mg/l. |
| Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts, CAS: 68457-79-4 |
| LC50, (96h), fish: 4,5 mg/l (OECD 203). |
| EC50, (48h), Daphnia magna: 5,4 mg/l (OECD 202). |
| Alkyl thiadiazole, CAS: 91648-65-6 |
| LL50, (96h), fish: > 1000 mg/l. |

12.2 Persistence and degradability

Behaviour in environment compartments not determined
Behaviour in sewage plant not determined
Biological degradability The product is not readily biodegradable.

12.3 Bioaccumulative potential

Contains components with the potential to bioaccumulate.

12.4 Mobility in soil

Product is immobilized by adsorption to soil particles.

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12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Other adverse effects

The product is insoluble in water.

Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Disposal in an incineration plant in accordance with the regulations of the local authorities.

In according to RoHS!

Waste no. (recommended) 120112* spent waxes and fats

Contaminated packaging

Uncontaminated packaging may be taken for recycling.

Uncontaminated packaging may be reused.

Waste no. (recommended) 150110*
150102

SECTION 14: Transport information

14.1 UN number

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

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14.2 UN proper shipping name

Transport by land according to ADR/RID NO DANGEROUS GOODS

Inland navigation (ADN) NO DANGEROUS GOODS

Marine transport in accordance with IMDG NOT CLASSIFIED AS "DANGEROUS GOODS"

Air transport in accordance with IATA NOT CLASSIFIED AS "DANGEROUS GOODS"

14.3 Transport hazard class(es)

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

14.4 Packing group

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

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14.5 Environmental hazards

Transport by land according to ADR/RID no

Inland navigation (ADN) no

Marine transport in accordance with IMDG no

Air transport in accordance with IATA no

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EEC-REGULATIONS 1991/689 (2001/118); 2010/75; 2004/42; 648/2004; 1907/2006 (REACH); 1272/2008; 75/324/EEC (2008/47/EC); (EU) 2015/830; (EU) 2016/131; (EU) 517/2014

TRANSPORT- DOT-Classification, ADR (2017); IMDG-Code (2017, 38. Amdt.); IATA-DGR (2018).

NATIONAL REGULATIONS (GB): EH40/2005 Workplace exposure limits (Second edition, published December 2011).

- Observe employment restrictions for people no

- VOC (2010/75/CE) 0 %

15.2 Chemical safety assessment

not applicable

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SECTION 16: Other information

16.1 Hazard statements (SECTION 03)

H318 Causes serious eye damage.

H315 Causes skin irritation.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

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16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
 RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
 ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
 ATE = acute toxicity estimate
 CAS = Chemical Abstracts Service
 CLP = Classification, Labelling and Packaging
 DMEL = Derived Minimum Effect Level
 DNEL = Derived No Effect Level
 EC50 = Median effective concentration
 ECB = European Chemicals Bureau
 EEC = European Economic Community
 EINECS = European Inventory of Existing Commercial Chemical Substances
 ELINCS = European List of Notified Chemical Substances
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
 IC50 = Inhibition concentration, 50%
 IMDG = International Maritime Code for Dangerous Goods
 IUCLID = International Uniform Chemical Information Database
 LC50 = Lethal concentration, 50%
 LD50 = Median lethal dose
 LC0 = lethal concentration, 0%
 LOAEL = lowest-observed-adverse-effect level
 MARPOL = International Convention for the Prevention of Marine Pollution from Ships
 NOAEL = No Observed Adverse Effect Level
 NOEC = No Observed Effect Concentration
 PBT = Persistent, Bioaccumulative and Toxic substance
 PNEC = Predicted No-Effect Concentration
 REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
 STP = Sewage Treatment Plant
 TLV®/TWA = Threshold limit value – time-weighted average
 TLV®STEL = Threshold limit value – short-time exposure limit
 VOC = Volatile Organic Compounds
 vPvB = very Persistent and very Bioaccumulative

16.3 Other information

Classification procedure

Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects. (Calculation method)

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Modified position

SECTION 3 been added: Naphthenic acids, zinc salts