

FAG Arcanol LOAD460

Safety Data Sheet (SDS) according to OSHA-GHS (29 CFR 1910.1200 HCS 2012) (US)

Date printed 03.02.2017, Revision 03.02.2017
Version 05. Supersedes version: 04

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

1.1 Product identifier

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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 4681
Fax +49 (0)9721 91 1766
Homepage www.schaeffler.com
E-mail wolzwlf@schaeffler.com

Address enquiries to

Technical information

wolzwlf@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

No classification.

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2.2 Label elements

The product does not require a hazard in accordance to OSHA Standard 29 CFR 1910.1200 (HCS 2012)

Hazard pictograms	none
Signal word	none
Hazard statements	none
Special labelling	none

2.3 Other hazards

Environmental hazards	Does not contain any PBT or vPvB substances.
Other hazards	none

SECTION 3: Composition / Information on ingredients

Product-type:

The product is a mixture.

Range [%]	Substance
25 - < 50	Residual oils (petroleum), solvent-refined CAS: 64742-01-4
10 - < 25	Distillates (petroleum), solvent-refined heavy naphthenic CAS: 64741-96-4
1 - 10	Polysulfides, di-tert-dodecyl CAS: 68425-15-0

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.

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SECTION 4: First aid measures

4.1 Description of first aid measures

General information	Take off contaminated clothing and wash before reuse.
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.

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.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing Foam.
Dry powder.
Carbon dioxide.

Extinguishing media that must not be used Water.

5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.
Nitrogen oxides (NO_x).
Sulphur oxides (SO_x).

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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.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

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.

Wash hands before breaks and after work.
Use barrier skin cream.
Do not eat, drink or smoke when using this product.
Contaminated work clothing should not be allowed out of the
workplace.

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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.
Store in a dry place.
Do not keep at temperatures above 0°C / 32°F.
Recommended storage temperature: 5°C/41°F - 40°C/104°F

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (US)

Substance
Distillates (petroleum), solvent-refined heavy naphthenic
CAS: 64741-96-4, EINECS/ELINCS: 265-097-6, EU-INDEX: 649-457-00-3
Long-term exposure: 5 mg/m ³ , oil mist

8.2 Exposure controls

Additional advice on system design Ensure adequate ventilation on workstation.
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.
General limit for oil mist should be noted.

Eye protection Safety glasses. (EN 166:2001)

Hand protection The details concerned are recommendations. Please contact the glove supplier for further information.
0,4 mm/ Nitrile rubber, >480 min (EN 374-1/-2/-3).

Skin protection Not required under normal conditions.
Avoid contact with eyes and skin.

Respiratory protection Not required under normal conditions.

Thermal hazards none

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	brown
Odor	characteristic
Odor threshold	not required
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	> 250
Flash point [°C]	> 200
Flammability [°C]	not determined
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Oxidizing properties	no
Vapor pressure/gas pressure [kPa]	not determined
Density [g/ml]	~ 0,93 (DIN 51757) (20 °C / 68,0 °F)
Bulk density [kg/m ³]	not applicable
Solubility in water	virtually insoluble
Partition coefficient [n-octanol/water]	not determined
Viscosity	not applicable
Relative vapor density determined in air	not applicable
Evaporation speed	not applicable
Melting point [°C]	> 170
Autoignition temperature [°C]	not determined
Decomposition temperature [°C]	> 240

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

The product is stable under standard conditions.

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10.3 Possibility of hazardous reactions

Reactions with oxidizing agents.

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

10.4 Conditions to avoid

Strong heating, because the thermal decomposition starts from > 240°C.

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	
ATE-mix, oral, > 2000 mg/kg.	
Substance	
Polysulfides, di-tert-dodecyl, CAS: 68425-15-0	
LD50, oral, Rat: ca. 20000 mg/kg bw (ECHA).	
Distillates (petroleum), solvent-refined heavy naphthenic, CAS: 64741-96-4	
LD50, dermal, Rabbit: > 2000 mg/kg.	
LD50, oral, Rat: > 5000 mg/kg.	
LC50, inhalative, Rat: > 4 mg/l/4h (IUCLID).	
LC50, inhalative, Rat: 2,18 mg/l/4h (IUCLID).	

Serious eye damage/irritation

Based on available data, the classification criteria are not met. Slight irritant effect.

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.

Specific target organ toxicity — single exposure

Based on available data, the classification criteria are not met.

Specific target organ toxicity — repeated exposure

Based on available data, the classification criteria are not met.

Mutagenicity

Based on available data, the classification criteria are not met.

Reproduction toxicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

General remarks

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. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials. Toxicological data of complete product are not available.

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SECTION 12: Ecological information

12.1 Toxicity

	Substance
	Polysulfides, di-tert-dodecyl, CAS: 68425-15-0
	LC50, (96h), Danio rerio: >100 mg/L (ECHA).
	Distillates (petroleum), solvent-refined heavy naphthenic, CAS: 64741-96-4
	LC50, (96h), Oncorhynchus mykiss: > 5000 mg/l.

12.2 Persistence and degradability

Behaviour in environment compartments not determined

Behaviour in sewage plant not determined

Biological degradability not determined

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Other adverse effects

Do not discharge product unmonitored into the environment.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

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

Contaminated packaging

Uncontaminated packaging may be taken for recycling.
Uncontaminated packaging may be reused.

RCRA Hazard Class (40CFR 261)

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities.

SECTION 14: Transport

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"

DOT Road Shipment Information (49 CFR) 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

US Regulations

National regulations	29 CFR 1910.1200-HCS 2012, OSHA-PEL, ACGIH-TLV, NTP, IARC, SARA Title III, NFPA, TSCA, California - Prop. 65
- SARA, 302	No information available.
- SARA, 311	No information available.
- SARA, 313	No information available.
- CA Proposition 65	No chemical substances in this material are named on the California P65 list.
- TSCA	All chemical substances in this material are included on or exempted from listing on the TSCA Inventory.
- FDA	not applicable
American Conference of Governmental Industrial Hygienists - ACGIH	Does not contain a relevant substance that meets the classification criteria.
International Agency for Research on Cancer IARC	Does not contain a relevant substance that meets the classification criteria.
National Toxicology Program - NTP	This product is not named NTP - National Toxicology Program.
HAP-VOC	not applicable
Transport-regulations	DOT-Classification, ADR (2017); IMDG-Code (2017, 38. Amdt.); IATA-DGR (2017).

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SECTION 16: Other information

16.1 Ratings

HMIS Ratings

HEALTH	0	0 - Minimal Hazard
FLAMMABILITY	1	1 - Slight Hazard
PHYSICAL HAZARD	0	0 - Minimal Hazard
PERSONAL PROTECTION	X	X - Personal protection rating to be supplied by user depending on use conditions

NFPA Ratings

1
0 0
-

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16.2 Abbreviations and acronyms:

ACGIH = American Conference of Governmental Industrial Hygienists;
 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;
 CAS = Chemical Abstracts Service;
 CERCLA = Comprehensive Environmental Response, Compensation and Liability Act;
 CFR = Code of Federal Regulations;
 CPR = Controlled Products Regulations;
 DMEL = Derived Minimum Effect Level;
 DNEL = Derived No Effect Level;
 DOT = Department of Transportation;
 EC50 = Median effective concentration;
 EPA = Environmental Protection Agency;
 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;
 IARC = International Agency of Research on Cancer;
 IATA = International Air Transport Association;
 TSCA = Toxic Substance Control Act;
 HMIS = Hazardous Materials Identification System;
 NFPA = National Fire Protection Association;
 NIOSH = National Institute for Occupational Safety and Health;
 OSHA = Occupational Safety and Health Administration;
 LC50 = Lethal concentration, 50%;
 LD50 = Median lethal dose, 50%;
 MARPOL = International Convention for the Prevention of Marine Pollution from Ships;
 PBT = Persistent, Bioaccumulative and Toxic substance;
 PNEC = Predicted No-Effect Concentration;
 REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals;
 SARA = Superfund Amendments and Reauthorization Act;
 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;

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16.3 Other information

Customs Tariff 34031990

Classification procedure

Modified position SECTION 3 been added: Distillates (petroleum), solvent-refined heavy naphthenic

SECTION 3 been added: Residual oils (petroleum), solvent-refined