

# FAG Arcanol MULTITOP

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

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

#### 1.1 Product identifier

**FAG Arcanol MULTITOP**

#### 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](http://www.schaeffler.com)  
E-mail [wolzwlf@schaeffler.com](mailto:wolzwlf@schaeffler.com)

##### Address enquiries to

##### Technical information

[wolzwlf@schaeffler.com](mailto:wolzwlf@schaeffler.com)

##### Safety Data Sheet

[sdb@chemiebuero.de](mailto: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

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

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### 2.2 Label elements

The product is classified as hazardous in accordance to OSHA Standard 29 CFR 1910.1200 (HCS 2012)

<b>Hazard pictograms</b>	none
<b>Signal word</b>	none
<b>Hazard statements</b>	H412 Harmful to aquatic life with long lasting effects.
<b>Precautionary statements</b>	P273 Avoid release to the environment. P501 Dispose of contents/container to in accordance with local/regional/national/international regulation.
<b>Special labelling</b>	Contains: Benzenesulfonic acid, diC10-14 alkyl derivs., calcium salts. EUH208 May produce an allergic reaction.

### 2.3 Other hazards

<b>Human health dangers</b>	Frequent persistent contact with the skin can cause skin irritation.
<b>Environmental hazards</b>	Does not contain any PBT or vPvB substances.
<b>Other hazards</b>	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
10 - < 50	Lubricating oils (petroleum), base oils, paraffinic CAS: 93572-43-1
10 - < 50	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based CAS: 72623-87-1
2,5 - < 5	Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) CAS: 4259-15-8
0,5 - < 1	Benzenesulfonic acid, diC10-14 alkyl derivs., calcium salts

**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.

#### 4.2 Most important symptoms and effects, both acute and delayed

Headache  
Irritant effects

#### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.  
Forward this sheet to the doctor.

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### SECTION 5: Fire-fighting measures

#### 5.1 Extinguishing media

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

**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.  
Carbon monoxide (CO)  
Nitrogen oxides (NOx).

#### 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

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### 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.

#### 7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.  
Prevent penetration into the ground.  
Do not store together with oxidizing agents.  
Do not store together with food and animal food/diet.  
Keep container tightly closed.  
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 (US)**

not applicable

#### DNEL

Substance
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate), CAS: 4259-15-8
Industrial, inhalative, Long-term - systemic effects: 6,6 mg/m <sup>3</sup> .
Industrial, dermal, Long-term - systemic effects: 9,6 mg/kg bw/d.
general population, oral, Long-term - systemic effects: 0,19 mg/kg bw/d.
general population, dermal, Long-term - systemic effects: 4,8 mg/kg bw/d.
general population, inhalative, Long-term - systemic effects: 1,67 mg/m <sup>3</sup> .
Benzenesulfonic acid, diC10-14 alkyl derivs., calcium salts
Industrial, dermal, Long-term - systemic effects: 25 mg/kg bw/day.
Industrial, inhalative, Long-term - systemic effects: 35,26 mg/m <sup>3</sup> .
general population, oral, Long-term - systemic effects: 2,5 mg/kg bw/day.
general population, dermal, Long-term - systemic effects: 12.5 mg/kg bw/day.
general population, inhalative, Long-term - systemic effects: 8,7 mg/m <sup>3</sup> .

#### PNEC

Substance
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate), CAS: 4259-15-8
oral (food), 8,33 mg/kg food.
soil, 0,0548 mg/kg dw.
sediment (seawater), 0,00701 mg/kg dw.
sediment (freshwater), 0,0701 mg/kg dw.
sewage treatment plants (STP), 3,8 mg/l.
seawater, 4,6 µg/l.
freshwater, 4 µg/l.
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
oral (food), 9,33 mg/kg.
Benzenesulfonic acid, diC10-14 alkyl derivs., calcium salts
soil, 36739,74 mg/kg soil dw.
sediment (seawater), 45211 mg/kg sediment dw.
sediment (freshwater), 45211 mg/kg sediment dw.
sewage treatment plants (STP), 1000 mg/l.
seawater, 0,1 mg/l.
freshwater, 0,1 mg/l.

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### 8.2 Exposure controls

<b>Additional advice on system design</b>	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.
<b>Eye protection</b>	Safety glasses. (EN 166:2001)
<b>Hand protection</b>	The details concerned are recommendations. Please contact the glove supplier for further information. In full contact: > 0,4 mm: Butyl rubber, >120 min (EN 374-1/-2/-3).
<b>Skin protection</b>	light protective clothing Avoid contact with eyes and skin.
<b>Respiratory protection</b>	not applicable
<b>Thermal hazards</b>	not applicable
<b>Delimitation and monitoring of the environmental exposition</b>	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	dark brown
Odor	characteristic
Odor threshold	not applicable
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	> 300°C/> 572°F
Flash point [°C]	> 200°C/> 392°F
Flammability [°C]	not determined
Lower explosion limit	not determined
Upper explosion limit	not determined
Oxidizing properties	no
Vapor pressure/gas pressure [kPa]	< 0,01 (20°C)
Density [g/ml]	~ 0,88 (20°C)
Bulk density [kg/m³]	not applicable
Solubility in water	virtually insoluble
Partition coefficient [n-octanol/water]	not determined
Viscosity	82 mm²/s (40°C)
Relative vapor density determined in air	not applicable
Evaporation speed	not applicable
Melting point [°C]	not determined
Autoignition temperature [°C]	not determined
Decomposition temperature [°C]	> 200°C/> 392°F

#### 9.2 Other information

Drop point: > 190°C

### 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 vapors may be released.

### 10.4 Conditions to avoid

See SECTION 7.2.

### 10.5 Incompatible materials

not determined

### 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

Substance
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate), CAS: 4259-15-8
LD50, dermal, Rabbit: > 5000 mg/kg bw (OECD 402).
LD50, oral, Rat: > 3100 mg/kg bw (OECD 401).
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
LD50, dermal, Rabbit: >= 2000 mg/kg (OECD 402).
LD50, oral, Rat: >= 5000 mg/kg (OECD 401).
LC50, inhalative, Rat: >= 5,53 mg/l (OECD 403).
Benzenesulfonic acid, diC10-14 alkyl derivs., calcium salts
LD50, dermal, Rabbit: >2000 mg/kg bw (OECD 402)
LD50, oral, Rat: >10000 - <20000 mg/kg bw (Lit.).
LC50, inhalative, Rat: >1,9 mg/l air (EPA OPP 81-3)
Lubricating oils (petroleum), base oils, paraffinic, CAS: 93572-43-1
LD50, dermal, Rabbit: > 5000 mg/kg.
LD50, oral, Rat: > 5000 mg/kg.

##### Serious eye damage/irritation

Based on the information available, the classification criteria have not been fulfilled.

##### Skin corrosion/irritation

Based on the information available, the classification criteria have not been fulfilled.

##### Respiratory or skin sensitisation

Toxicological data of complete product are not available.  
May produce an allergic reaction.  
Calculation method

##### Specific target organ toxicity — single exposure

Based on the information available, the classification criteria have not been fulfilled.

##### Specific target organ toxicity — repeated exposure

Based on the information available, the classification criteria have not been fulfilled.

##### Mutagenicity

Based on the information available, the classification criteria have not been fulfilled.

##### Reproduction toxicity

Based on the information available, the classification criteria have not been fulfilled.

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### Carcinogenicity

Based on the information available, the classification criteria have not been fulfilled.

### Aspiration hazard

Based on the information available, the classification criteria have not been 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

Substance
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate), CAS: 4259-15-8
LC50, (96h), Oncorhynchus mykiss: 1 - 10 mg/l.
EC50, (72h), Desmodesmus subspicatus: > 240 mg/l.
EC50, (48h), Daphnia magna: 1 - 10 mg/l (OECD 202).
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
EL50, (24h), Daphnia magna: >10000 mg/l (OECD).
LL50, (96h), Pimephales promelas: >100 mg/l (OECD).
NOEL, (72h), Pseudokirchneriella subcapitata: >100 mg/l (OECD).
NOEL, (21d), Daphnia magna: 10 mg/l (OECD).
Benzenesulfonic acid, diC10-14 alkyl derivs., calcium salts
EL50, (72h), Scenedesmus subspicatus: >100 mg/l (OECD 201).
EL50, (48h), Daphnia magna: >100 mg/l (OECD 202).
LL50, (96h), Oncorhynchus mykiss: >100 mg/l (OECD 203).

### 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

not determined

### 12.4 Mobility in soil

not determined

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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 toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Disposal in an incineration plant in accordance with the regulations of the local authorities.  
In according to RoHS!

#### 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 This product does not contain any ingredients regulated under this list.
- SARA, 311 This product does not contain any ingredients regulated under this list.
- SARA, 313 This product does not contain any ingredients regulated under this list.
- CA Proposition 65 not applicable
- TSCA All chemical substances in this material are included on or exempted from listing on the TSCA Inventory.
- FDA not determined

##### American Conference of Governmental Industrial Hygienists - ACGIH

Ingredients not listed as carcinogens.

##### International Agency for Research on Cancer IARC

Ingredients not listed as carcinogens.

##### National Toxicology Program - NTP

not applicable

##### HAP-VOC

not applicable

##### Transport-regulations

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

### 15.2 Chemical safety assessment

not applicable

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### SECTION 16: Other information

#### 16.1 Hazard statements (SECTION 03)

H304 May be fatal if swallowed and enters airways.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

H318 Causes serious eye damage.

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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 Ratings

#### HMIS Ratings

HEALTH	0	0 - Minimal Hazard
FLAMMABILITY	1	1 - Slight Hazard
PHYSICAL HAZARD	0	0 - Minimal Hazard
PERSONAL PROTECTION	A	A - Safety Glasses

#### NFPA Ratings

1
0 0
not