

# Arcanol LOAD460

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

Date printed 17.07.2020, Revision 17.07.2020  
Version 08. Supersedes version: 07

Page 1 / 16

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

#### 1.1 Product identifier

Arcanol LOAD460

#### 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  
Homepage [www.schaeffler.com](http://www.schaeffler.com)

##### Address enquiries to

##### Technical information

[support.is@schaeffler.com](mailto:support.is@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 [REGULATION (EC) No 1272/2008]

Skin Sens. 1: H317 May cause an allergic skin reaction.

# Arcanol LOAD460

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

Date printed 17.07.2020, Revision 17.07.2020  
Version 08. Supersedes version: 07

Page 2 / 16

### 2.2 Label elements

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

**Hazard pictograms**



**Signal word**

WARNING

**Contains:**

Naphthenic acids, zinc salts

Dipentylammonium dipentylthiocarbamate

**Hazard statements**

H317 May cause an allergic skin reaction.

**Precautionary statements**

P280 Wear protective gloves.

P333+P313 If skin irritation or rash occurs: Get medical advice / attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

### 2.3 Other hazards

**Environmental hazards**

Does not contain any PBT or vPvB substances.

**Other hazards**

none

## SECTION 3: Composition / Information on ingredients

### 3.1 Substances

The product is a mixture.

# Arcanol LOAD460

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

Date printed 17.07.2020, Revision 17.07.2020  
Version 08. Supersedes version: 07

Page 3 / 16

### 3.2 Mixtures

| Range [%]    | Substance   |
|--------------|---|
| 1 - < 2,5    | Naphthenic acids, zinc salts  |
|              | CAS: 12001-85-3, EINECS/ELINCS: 234-409-2   |
|              | GHS/CLP: Skin Sens. 1B: H317 - Eye Irrit. 2: H319 - Aquatic Chronic 2: H411   |
| 0,1 - < 0,25 | Dipentylammonium dipentylthiocarbamate  |
|              | CAS: 71902-20-0, EINECS/ELINCS: 276-172-8, Reg-No.: 01-2120793078-43  |
|              | GHS/CLP: Acute Tox. 4: H302 - Skin Sens. 1B: H317 - Aquatic Acute 1: H400 - Aquatic Chronic 1: H410, M <sub>acute</sub> = 1 |
| 0 - < 0,25   | Zinc oxide  |
|              | CAS: 1314-13-2, EINECS/ELINCS: 215-222-5, EU-INDEX: 030-013-00-7, Reg-No.: 01-2119463881-32-XXXX                            |
|              | GHS/CLP: Aquatic Acute 1: H400 - Aquatic Chronic 1: H410, M <sub>acute</sub> = 1, M <sub>chronic</sub> = 1                  |

#### 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

|                            |   |
|----------------------------|---|
| <b>General information</b> | Take off contaminated clothing and wash before reuse.   |
| <b>Inhalation</b>          | Ensure supply of fresh air.<br>In the event of symptoms seek medical treatment.   |
| <b>Skin contact</b>        | When in contact with the skin, clean with soap and water.<br>Consult a doctor if skin irritation persists.  |
| <b>Eye contact</b>         | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>If eye irritation persists: Get medical advice/attention. |
| <b>Ingestion</b>           | Seek medical advice immediately.<br>Do not induce vomiting.   |

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

None known.

# Arcanol LOAD460

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

Date printed 17.07.2020, Revision 17.07.2020  
Version 08. Supersedes version: 07

Page 4 / 16

### 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<sub>x</sub>).  
Sulphur oxides (SO<sub>x</sub>).

### 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

# Arcanol LOAD460

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

Date printed 17.07.2020, Revision 17.07.2020  
Version 08. Supersedes version: 07

Page 5 / 16

### 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.

#### 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 below 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

# Arcanol LOAD460

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

Date printed 17.07.2020, Revision 17.07.2020

Page 6 / 16

Version 08. Supersedes version: 07

### SECTION 8: Exposure controls / personal protection

#### 8.1 Control parameters

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

not applicable

#### DNEL

|   |
|---|
| Substance   |
| Zinc oxide, CAS: 1314-13-2  |
| Industrial, inhalative, Long-term - local effects: 0,5 mg/m <sup>3</sup> .            |
| Industrial, dermal, Long-term - systemic effects: 83 mg/kg bw/d.                      |
| Industrial, inhalative, Long-term - systemic effects: 5 mg/m <sup>3</sup> .           |
| general population, oral, Long-term - systemic effects: 0,83 mg/kg bw/d.              |
| general population, inhalative, Long-term - systemic effects: 2,5 mg/m <sup>3</sup> . |
| general population, dermal, Long-term - systemic effects: 83 mg/kg bw/d.              |

#### PNEC

|  |
|--|
| Substance                                |
| Zinc oxide, CAS: 1314-13-2               |
| soil, 35,6 mg/kg dw.                     |
| sediment (seawater), 56,5 mg/kg dw.      |
| sediment (freshwater), 117,8 mg/kg dw.   |
| sewage treatment plants (STP), 100 µg/L. |
| seawater, 6,1 µg/L.                      |
| freshwater, 20.6 µg/L.                   |

# Arcanol LOAD460

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

Date printed 17.07.2020, Revision 17.07.2020  
Version 08. Supersedes version: 07

Page 7 / 16

### 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 exposure 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.

**Other** 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.

# Arcanol LOAD460

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

Date printed 17.07.2020, Revision 17.07.2020  
Version 08. Supersedes version: 07

Page 8 / 16

### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

|  |  |
|--|--|
| <b>Form</b>                                      | pasty                                  |
| <b>Color</b>                                     | brown                                  |
| <b>Odor</b>                                      | characteristic                         |
| <b>Odour threshold</b>                           | not required                           |
| <b>pH-value</b>                                  | not applicable                         |
| <b>pH-value [1%]</b>                             | not applicable                         |
| <b>Boiling point [°C]</b>                        | > 250                                  |
| <b>Flash point [°C]</b>                          | > 200                                  |
| <b>Flammability (solid, gas) [°C]</b>            | No information available.              |
| <b>Lower explosion limit</b>                     | not applicable                         |
| <b>Upper explosion limit</b>                     | not applicable                         |
| <b>Oxidising properties</b>                      | no                                     |
| <b>Vapour pressure/gas pressure [kPa]</b>        | No information available.              |
| <b>Density [g/ml]</b>                            | ca. 0,93 (DIN 51757) (20 °C / 68,0 °F) |
| <b>Bulk density [kg/m³]</b>                      | not applicable                         |
| <b>Solubility in water</b>                       | virtually insoluble                    |
| <b>Partition coefficient [n-octanol/water]</b>   | No information available.              |
| <b>Viscosity</b>                                 | No information available.              |
| <b>Relative vapour density determined in air</b> | No information available.              |
| <b>Evaporation speed</b>                         | No information available.              |
| <b>Melting point [°C]</b>                        | > 170                                  |
| <b>Autoignition temperature [°C]</b>             | No information available.              |
| <b>Decomposition temperature [°C]</b>            | > 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.



# Arcanol LOAD460

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

Date printed 17.07.2020, Revision 17.07.2020  
Version 08. Supersedes version: 07

Page 9 / 16

### 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, 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.

# Arcanol LOAD460

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

Date printed 17.07.2020, Revision 17.07.2020

Page 10 / 16

Version 08. Supersedes version: 07

### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

##### Acute toxicity

|  |  |
|--|--|
| Product  |  |
| ATE-mix, oral, > 2000 mg/kg.                               |  |
| Substance  |  |
| Zinc oxide, CAS: 1314-13-2                                 |  |
| LD50, dermal, Rat: > 2000 mg/kg bw.                        |  |
| LD50, oral, Rat: > 15000 mg/kg (IUCLID).                   |  |
| LC50, inhalative, Rat: > 5,7 mg/l (4 h) (Lit.).            |  |
| Naphthenic acids, zinc salts, CAS: 12001-85-3              |  |
| LD50, oral, Rat: >2000 mg/kg bw (OECD 423).                |  |
| Dipentylammonium dipentylidithiocarbamate, CAS: 71902-20-0 |  |
| LD50, oral, Rat: 300 - 2000 mg/kg bw.                      |  |

##### Serious eye damage/irritation

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

##### Skin corrosion/irritation

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

##### Respiratory or skin sensitisation

May cause an allergic skin reaction.  
Calculation method

##### 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

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

##### Reproduction toxicity

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

##### Carcinogenicity

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

# Arcanol LOAD460

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

Date printed 17.07.2020, Revision 17.07.2020  
Version 08. Supersedes version: 07

Page 11 / 16

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.

### SECTION 12: Ecological information

#### 12.1 Toxicity

|   |
|---|
| Product   |
| Based on the available information, the classification criteria are not fulfilled.: |
| Substance   |
| Zinc oxide, CAS: 1314-13-2  |
| EC50, (72h), Selenastrum capricornutum: 0,17 mg/l (Lit.).                           |
| Naphthenic acids, zinc salts, CAS: 12001-85-3                                       |
| EL50, (72h), Pseudokirchneriella subcapitata: 4 mg/L (OECD 201).                    |
| EL50, (48h), Daphnia magna: 35 mg/L (OECD 202).                                     |
| LL50, (96h), Cyprinus carpio: >100 mg/L (OECD 203).                                 |
| Dipentylammonium dipentylidithiocarbamate, CAS: 71902-20-0                          |
| EC50, (72h), Algae: 16 mg/L.  |
| EC50, (48h), Daphnia magna: 0.59 mg/L.  |

#### 12.2 Persistence and degradability

|  |                |
|--|----------------|
| <b>Behaviour in environment compartments</b> | not determined |
| <b>Behaviour in sewage plant</b>             | not determined |
| <b>Biological degradability</b>              | 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.

# Arcanol LOAD460

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

Date printed 17.07.2020, Revision 17.07.2020  
Version 08. Supersedes version: 07

Page 12 / 16

### 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

In according to RoHS!

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

**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)** 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

#### 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"

# Arcanol LOAD460

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

Date printed 17.07.2020, Revision 17.07.2020  
Version 08. Supersedes version: 07

Page 13 / 16

### 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

### 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

# Arcanol LOAD460

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

Date printed 17.07.2020, Revision 17.07.2020

Page 14 / 16

Version 08. Supersedes version: 07

### SECTION 15: Regulatory information

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

**EEC-REGULATIONS** 2008/98/EC 2000/532/EC); 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2015/830; (EU) 2016/131; (EU) 517/2014

**TRANSPORT-** ADR (2019); IMDG-Code (2019, 39. Amdt.); IATA-DGR (2020)  
**NATIONAL REGULATIONS** EH40/2005 Workplace exposure limits (Second edition, published  
(GB): December 2011).

- Observe employment restrictions for people no

- VOC (2010/75/CE) 0%

#### 15.2 Chemical safety assessment

not applicable

### SECTION 16: Other information

#### 16.1 Hazard statements (SECTION 03)

H410 Very toxic to aquatic life with long lasting effects.

H400 Very toxic to aquatic life.

H302 Harmful if swallowed.

H411 Toxic to aquatic life with long lasting effects.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

# Arcanol LOAD460

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

Date printed 17.07.2020, Revision 17.07.2020  
Version 08. Supersedes version: 07

Page 15 / 16

### 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  
EL50 = Median effective loading  
ELINCS = European List of Notified Chemical Substances  
EmS = Emergency Schedules  
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  
LL50 = Median lethal loading  
LQ = Limited Quantities  
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

# Arcanol LOAD460

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

Date printed 17.07.2020, Revision 17.07.2020  
Version 08. Supersedes version: 07

Page 16 / 16

### 16.3 Other information

**Customs Tariff**

34031990

**Classification procedure**

Skin Sens. 1: H317 May cause an allergic skin reaction. (Calculation method)

**Modified position**

SECTION 2 been added: P362+P364 Take off contaminated clothing and wash it before reuse.

SECTION 2 been added: P333+P313 If skin irritation or rash occurs: Get medical advice / attention.

SECTION 2 been added: P280 Wear protective gloves.

SECTION 2 been added: H317 May cause an allergic skin reaction.

SECTION 2 been added: Skin Sens. 1

SECTION 2 deleted: EUH210 Safety data sheet available on request.

SECTION 11 been added: May cause an allergic skin reaction.

SECTION 11 deleted: Based on the available information, the classification criteria are not fulfilled.