Arcanol LOAD400

Safety Data Sheet (UK REACH) (GB)

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

1.1 Product identifier

Arcanol LOAD400

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

Address enquiries to
Technical information
Safety Data Sheet

sdb@chemiebuero.de (No dispatch of safety data sheets)
Safety data sheets are available from the supplier.

1.4 Emergency telephone number

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (GB) CLP]

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

2.2 Label elements

The product is required to be labelled in accordance with regulation CLP.

Hazard pictograms

Signal word WARNING

Contains: Polysulfides, di-tert-dodecyl

Zinc naphthenate

Hazard statements H317 May cause an allergic skin reaction.

Precautionary statements P280 Wear protective gloves.
P302+P352 IF ON SKIN: Wash with plenty of water / soap.
P333+P313 If skin irritation or rash occurs: Get medical advice / attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P501 Dispose of contents/container in accordance with local/national regulation.

2.3 Other hazards

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 none

SECTION 3: Composition / Information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

The product is a mixture.

Range [%]	Substance
<= 10	Polysulfides, di-tert-dodecyl
	CAS: 68425-15-0, EINECS/ELINCS: 270-335-7, Reg-No.: 01-2119540516-41-XXXX
	GHS/CLP: Skin Sens. 1B: H317
< = 1.8	Zinc naphthenate
	CAS: 84418-50-8, EINECS/ELINCS: 282-762-6, Reg-No.: 01-2119988500-34-XXXX
	GHS/CLP: Skin Sens. 1: H317 - Aquatic Chronic 3: H412
< = 0.23	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-Factor (acute): 1, M-Factor (chronic): 1

Comment on component parts

All chemical substances in this material are included on or exempted from listing on the NZIoC-Inventory.
All chemical substances in this material are included on or exempted from listing on the IECSC Inventory.
contains less than 3% w/w DMSO-extract
-
-
For full text of H-statements: see SECTION 16.

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

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

Hoarseness

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.
Forward this sheet to your 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.
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 (NOx).
Sulphur oxides (SOx).

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.
Wear suitable protective equipment. For personal protection see SECTION 8.

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.
Avoid contact with eyes and skin. Use personal protective equipment.

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

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

not relevant

Ingredients with occupational exposure limits to be monitored EU (2004/37/EG)

not relevant

DNEL

	Substance
	Polysulfides, di-tert-dodecyl, CAS: 68425-15-0
	There are no DNEL values established for the substance.
	Zinc oxide, CAS: 1314-13-2
	Industrial, inhalative, Long-term - local effects, 0.5 mg/m³
	Industrial, dermal, Long-term - systemic effects, 83 mg/kg bw/day
	Industrial, inhalative, Long-term - systemic effects, 5 mg/m³
	general population, oral, Long-term - systemic effects, 0.83 mg/kg bw/day
	general population, dermal, Long-term - systemic effects, 83 mg/kg bw/day
	general population, inhalative, Long-term - systemic effects, 2.5 mg/m³

PNEC

	Substance
	Polysulfides, di-tert-dodecyl, CAS: 68425-15-0
	oral (food), 66.7 mg/kg food
	sediment (freshwater), 3.85 mg/kg sediment dw
	sewage treatment plants (STP), 1 g/L
	sediment (seawater), 385 µg/kg sediment dw
	Zinc oxide, CAS: 1314-13-2
	seawater, 6.1 µg/l
	sewage treatment plants (STP), 100 µg/l
	sediment (freshwater), 117.8 mg/kg sediment dw
	sediment (seawater), 56.5 mg/kg sediment dw
	freshwater, 20.6 µg/l
	soil, 35.6 mg/kg soil dw
	Zinc naphthenate, CAS: 84418-50-8
	sewage treatment plants (STP), 147.73 µg/L
	seawater, 0.64 µg/L
	sediment (freshwater), 31.93 mg/kg Sediment dw
	sediment (seawater), 3.19 mg/kg Sediment dw
	soil, 6.38 mg/kg Boden dw
	freshwater, 6.39 µg/L

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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Semi-solid
Form	pasty
Color	amber colour
Odor	characteristic
Odour threshold	not required
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	No information available.
Flash point [°C]	228 (442.4 °F) (closed cup)
Flammability	No information available.
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	No information available.
Density [g/cm³]	< 1 (20 °C / 68,0 °F)
Relative density	No information available.
Bulk density [kg/m³]	not applicable
Solubility in water	virtually insoluble
Solubility other solvents	No information available.
Partition coefficient [n-octanol/water]	not applicable
Kinematic viscosity	No information available.
Relative vapour density	No information available.
Evaporation speed	No information available.
Melting point [°C]	> 170
Auto-ignition temperature [°C]	No information available.
Decomposition temperature [°C]	> 240
Particle characteristics	No information available.

9.2 Other information

Penetration number: 265 - 295 (0.1 mm) (25°C)

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.

10.3 Possibility of hazardous reactions

Reactions with oxidizing agents.

10.4 Conditions to avoid

Heating (decomposition)

10.5 Incompatible materials

Strong oxidizing agent.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity

	Substance
	Polysulfides, di-tert-dodecyl, CAS: 68425-15-0
	LD50, oral, Rat, ca. 20000 mg/kg bw (ECHA)
	Zinc oxide, CAS: 1314-13-2
	LD50, oral, Rat, > 15000 mg/kg (OECD 401)
	Zinc naphthenate, CAS: 84418-50-8
	LD50, oral, Rat, > 2000 mg/kg bw

Acute dermal toxicity

	Substance
	Polysulfides, di-tert-dodecyl, CAS: 68425-15-0
	LD0, dermal, Rat, 2000 mg/kg bw
	NOAEL, oral, Rat, 1000 mg/kg bw/day
	Zinc oxide, CAS: 1314-13-2
	LD50, dermal, Rat, > 2000 mg/kg
	Zinc naphthenate, CAS: 84418-50-8
	LD50, dermal, Rat, > 2000 mg/kg bw

Acute inhalational toxicity

	Substance
	Zinc oxide, CAS: 1314-13-2
	LC50, inhalative, Rat, > 5.7 mg/l (4h)
	Zinc naphthenate, CAS: 84418-50-8
	LC50, inhalative, Rat, > 0.42 mg/l/4h

Serious eye damage/irritation

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

	Substance
	Polysulfides, di-tert-dodecyl, CAS: 68425-15-0
	no adverse effect observed
	Zinc oxide, CAS: 1314-13-2
	Eye, non-irritating
	Zinc naphthenate, CAS: 84418-50-8
	Eye, Rabbit, OECD 405, non-irritating

Skin corrosion/irritation Based on the available information, the classification criteria are not fulfilled.

	Substance
	Polysulfides, di-tert-dodecyl, CAS: 68425-15-0
	no adverse effect observed
	Zinc oxide, CAS: 1314-13-2
	dermal, non-irritating
	Zinc naphthenate, CAS: 84418-50-8
	dermal, Rabbit, OECD 404, non-irritating

Respiratory or skin sensitisation May cause an allergic skin reaction.
Calculation method

	Substance
	Zinc oxide, CAS: 1314-13-2
	inhalative, non-sensitizing
	dermal, non-sensitizing
	Zinc naphthenate, CAS: 84418-50-8
	dermal, Guinea pig, OECD 406, sensitising

Specific target organ toxicity — single exposure Based on the available information, the classification criteria are not fulfilled.

	Substance
	Zinc oxide, CAS: 1314-13-2
	inhalative, non-irritating

Specific target organ toxicity — repeated exposure Based on the available information, the classification criteria are not fulfilled.

	Substance
	Zinc oxide, CAS: 1314-13-2
	NOAEL, oral, Rat, 13.3 mg/kg bw/day (subchronic), The effects observed are not sufficient for
	NOAEC, inhalative, Rat, 1.5 mg/m³ (subchronic), The effects observed are not sufficient for cla
	LOAEL, dermal, Rat, 75 mg/kg bw/day (subacute), The effects observed are not sufficient for c
	Zinc naphthenate, CAS: 84418-50-8
	NOAEL, oral, Rat, 50 mg/kg bw/day

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

	Substance
	Zinc naphthenate, CAS: 84418-50-8

	InVivo. OECD 474, negativ
	InVitro, OECD 471, negativ

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

- Fertility

	Substance
	Zinc oxide, CAS: 1314-13-2
	NOAEC, inhalative, Rat, 7.5 mg/m³ (subacute), no adverse effect observed
	Zinc naphthenate, CAS: 84418-50-8
	NOAEL, oral, Rat, 188 mg/kg bw/day
	NOAEL, oral, Rat, 250 mg/kg bw/day

- Development

	Substance
	Zinc oxide, CAS: 1314-13-2
	NOAEC, inhalative, Rat, 7.5 mg/m³ (subacute), no adverse effect observed
	Zinc naphthenate, CAS: 84418-50-8
	NOAEL, oral, Rat, 188 mg/kg bw/day
	NOAEL, oral, Rat, 250 mg/kg bw/day

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

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.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties No information available.

11.2.2 Other information none

SECTION 12: Ecological information

12.1 Toxicity

	Substance
	Polysulfides, di-tert-dodecyl, CAS: 68425-15-0
	NOEC, (72h), Algae, 80 µg/L
	NOEC, (48h), Invertebrates, 100 µg/L
	Zinc oxide, CAS: 1314-13-2
	EC50, (48h), Invertebrates, 155 - 100 000 µg/L
	EC50, (72h), Selenastrum capricornutum, 170 µg/l
	Zinc naphthenate, CAS: 84418-50-8
	LC50, (4d), fish, 112 - 5620 µg/L
	EC50, (4d), Algae, 18.1 - 80.5 mg/L
	EC50, (48h), Invertebrates, 155 - 20 000 µg/L

12.2 Persistence and degradability

Behaviour in environment compartments

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

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

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

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

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) 150110* packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

14.1 UN number or ID 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"

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 Maritime transport in bulk according to IMO instruments

not applicable

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) 2020/878; (EU) 2016/131; (EU) 517/2014; (EU) 2019/1148
- Comment on component parts	Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
- Annex I (REACH)	The product is not subject to Annex I restrictions.
- Annex XIV (REACH)	According to Annex XIV of Regulation (EC) 1907/2006 (REACH) the product does not contain any substances ≥ 0.1% that are subject to authorisation.
- Annex XVII (REACH)	According to Annex XVII of Regulation (EC) 1907/2006 (REACH) the product contains ≥ 0.1% of substances with the following restrictions. 3, 75 According to Annex XVII of Regulation (EC) 1907/2006 (REACH) the product is subject to the following restrictions. 3
TRANSPORT-	ADR (2023); IMDG-Code (2023, 41. Amdt.); IATA-DGR (2023)
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011); UK REACH; GB CLP.
- Observe employment restrictions for people	Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.
- VOC (2010/75/CE)	0%

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information

16.1 Hazard statements (SECTION 3)

H412 Harmful to aquatic life with long lasting effects.
H410 Very toxic to aquatic life with long lasting effects.
H400 Very toxic to aquatic life.

H317 May cause an allergic skin reaction.

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
IVIS = In vitro irritation score
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

16.3 Other information

Classification procedure	Skin Sens. 1: H317 May cause an allergic skin reaction. (Calculation method)
Modified position	none