

Arcanol TEMP90

Safety Data Sheet (UK REACH) (GB)

Date printed 27.07.2021, Revision 27.07.2021
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

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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 - 0
Homepage www.schaeffler.com

Address enquiries to

Technical information

support.is@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 (GB) CLP]

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

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.

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2.3 Other hazards

Human health dangers	Frequent persistent contact with the skin can cause skin irritation.
Environmental hazards	Does not contain any PBT or vPvB substances.
Other hazards	No particular hazards known.

SECTION 3: Composition / Information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

The product is a mixture.

Range [%]	Substance
10 - < 50	Distillates (petroleum), hydrotreated light paraffinic
	CAS: 64742-55-8
	GHS/CLP: Asp. Tox. 1: H304
1 - < 5	Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)
	CAS: 4259-15-8
	GHS/CLP: Eye Dam. 1: H318 - Aquatic Chronic 2: H411 SCL [%]: 50 - 100: Eye Dam. 1: H318
1 - < 5	Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates
	CAS: 80939-62-4
	GHS/CLP: Skin Irrit. 2: H315 - Eye Irrit. 2: H319 - Aquatic Chronic 2: H411
< 0,5	Naphthenic acids, zinc salts
	CAS: 12001-85-3
	GHS/CLP: Eye Irrit. 2: H319 - Skin Irrit. 2: H315 - Aquatic Chronic 2: H411

Comment on component parts

All chemical substances in this material are included on or exempted from listing on the AICS Inventory.
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	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

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.
Forward this sheet to your doctor.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing	Carbon dioxide. Water spray jet. Dry powder. Foam.
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Extinguishing media that must not be used	Full water jet.
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5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.
Carbon monoxide (CO)
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.
Forms slippery surfaces with water.

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.
Take off contaminated clothing and wash before reuse.

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.
Protect from heat/overheating.
Keep in a cool place. Store in a dry place.

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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 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 ³
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 ³

PNEC

Substance
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate), CAS: 4259-15-8
oral (food), 8.33 mg/kg food (AF=300)
soil, 0.062 mg/kg dw
sediment (seawater), 0.0322 mg/kg dw
sediment (freshwater), 0.322 mg/kg dw
sewage treatment plants (STP), 3.8 mg/L (AF= 100)
seawater, 4.6 µg/L (AF= 10 000)
freshwater, 4 µg/L (AF= 100)
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8
There are no PNEC values established for the substance.

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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	Safety glasses. (EN 166:2001)
Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information. > 0,4 mm: Butyl rubber, >120 min (EN 374-1/-2/-3).
Skin protection	light protective clothing
Other	Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier. Avoid contact with eyes and skin.
Respiratory protection	Not required under normal conditions. Breathing apparatus in the event of aerosol or mist formation.
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

Physical state	pasty
Color	light brown
Odor	characteristic
Odour threshold	No information available.
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	> 300/ 572°F
Flash point [°C]	> 250/ 482°F
Flammability (solid, gas) [°C]	No information available.
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	not determined
Density [g/cm³]	ca. 0,89 (20 °C / 68,0 °F)
Relative density	not determined
Bulk density [kg/m³]	not applicable
Solubility in water	virtually insoluble
Solubility other solvents	No information available.
Partition coefficient [n-octanol/water]	No information available.
Kinematic viscosity	not applicable
Relative vapour density	not applicable
Evaporation speed	not applicable
Melting point [°C]	No information available.
Auto-ignition temperature	No information available.
Decomposition temperature [°C]	> 250/ 482°F
Particle characteristics	No information available.

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.

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10.2 Chemical stability

The product is stable under standard conditions.

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

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 oral toxicity

Product	
ATE-mix, oral, Rat, > 5000 mg/kg bw	
Substance	
Naphthenic acids, zinc salts, CAS: 12001-85-3	
LD50, oral, Rat, 4920 mg/kg bw (GESTIS)	
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate), CAS: 4259-15-8	
LD50, oral, Rat, 3100 mg/kg bw	
Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates, CAS: 80939-62-4	
LD50, oral, Rat, > 2000 mg/kg (OECD 401)	
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8	
LD50, oral, Rat, > 5000 mg/kg bw	

Acute dermal toxicity

Product	
ATE-mix, dermal, Rabbit, > 3000 mg/kg bw	
Substance	
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate), CAS: 4259-15-8	
LD50, dermal, Rabbit, 5000 mg/kg bw	
Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates, CAS: 80939-62-4	
LD50, dermal, Rat, > 2000 mg/kg (OECD 402)	
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8	
LD50, dermal, Rabbit, > 5000 mg/kg bw	

Acute inhalational toxicity

Substance	
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8	
LC50, inhalative, Rat, > 5 mg/l/4h	

Serious eye damage/irritation

Toxicological data of complete product are not available.
 No classification.
 The undiluted substance CAS 4259-15-8 is an irritant while the 50% formulation in mineral oil was not an irritant.
 Classification was carried out based on substance-specific concentration limits.

Substance	
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate), CAS: 4259-15-8	

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Eye, Rabbit, OECD 405, corrosive	

Skin corrosion/irritation

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

Substance
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate), CAS: 4259-15-8
dermal, Rabbit, OECD 404, non-irritating

Respiratory or skin sensitisation

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

Substance
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate), CAS: 4259-15-8
dermal, Guinea pig, OECD 406, non-sensitizing

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.

Substance
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate), CAS: 4259-15-8
NOAEL, oral, Rat, 125 mg/kg bw/day

Mutagenicity

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

Substance
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate), CAS: 4259-15-8
InVivo, OECD 474, negativ
InVitro, OECD 471, negativ

Reproduction toxicity

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

Substance
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate), CAS: 4259-15-8
NOAEL, Rat, 30 mg/kg bw/day, OECD 421

Carcinogenicity

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

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Aspiration hazard

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

General remarks

Toxicological data of complete product are not available.

SECTION 12: Ecological information

12.1 Toxicity

Substance
Naphthenic acids, zinc salts, CAS: 12001-85-3
LC50, (96h), fish, 1,53 mg/L (GESTIS)
EC50, (48h), Crustacea, 4,6 mg/L (GESTIS)
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate), CAS: 4259-15-8
EL50, (48h), Daphnia magna, 75 mg/l (OECD 202)
NOEC, (21d), Daphnia magna, 0,4 mg/l (OECD 211)
LL50, (96h), Rainbow trout, 4,4 mg/l (OECD 203)
ErL50, (72h), Scenedesmus subspicatus, 410 mg/l (OECD 201)
EbL50, (72h), Scenedesmus subspicatus, 240 mg/l (OECD 201)
Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates, CAS: 80939-62-4
LC50, (96h), Oncorhynchus mykiss, 5,5 mg/L (OECD 203)
EC50, (3h), Activated sludge, > 100mg/L (OECD 209)
EC50, (72h), Selenastrum capricornutum, > 10 mg/L (OECD 201)
EC50, (48h), Daphnia magna, 1,2 mg/L (OECD 202)
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8
LL50, Daphnia magna, > 100 mg/l
LL50, fish, > 100 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.

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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 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

Do not discharge product unmonitored into the environment or into the drainage.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with national regulations.

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.

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

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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 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

TRANSPORT- ADR (2021); IMDG-Code (2021, 40. Amdt.); IATA-DGR (2021)
NATIONAL REGULATIONS (GB): EH40/2005 Workplace exposure limits (Second edition, published December 2011).

- Observe employment restrictions for people no

- VOC (2010/75/CE) < 0,1 %

15.2 Chemical safety assessment

not applicable

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SECTION 16: Other information

16.1 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

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16.2 Other information

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

Modified position none