

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

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

1.1 Product identifier

**Arcanol VIB3** 

- 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 informationsupport.is@schaeffler.comSafety Data Sheetsdb@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. 1B: H317 May cause an allergic skin reaction. Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting

effects.



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#### 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

**Hazard statements** H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements** P280 Wear protective gloves / eye protection / face protection.

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

attention.

P273 Avoid release to the environment.

P501 Dispose of contents/container in accordance with local/national

regulation.

### 2.3 Other hazards

**Environmental hazards** Does not contain any PBT or vPvB substances.

Other hazards Further hazards were not determined with the current level of

knowledge.

### SECTION 3: Composition / Information on ingredients

### 3.1 Substances

not applicable



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#### 3.2 Mixtures

#### The product is a mixture.

Range [%]	Substance	
1 - < 2.5	1 - < 2.5 Naphthenic acids, zinc salts	
	CAS: 12001-85-3, EINECS/ELINCS: 234-409-2, Reg-No.: 01-2120783834-41	
	GHS/CLP: Eye Irrit. 2: H319 - Skin Sens. 1B: H317 - Aquatic Chronic 2: H411	
1 - < 2.5	Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	
	CAS: 85940-28-9, EINECS/ELINCS: 288-917-4, Reg-No.: 01-2119521201-61-XXXX	
	GHS/CLP: Eye Irrit. 2: H319 - Skin Irrit. 2: H315 - Aquatic Chronic 2: H411	
0.1 - < 1	Dilithium tetraborate	
	CAS: 12007-60-2, EINECS/ELINCS: 234-514-3, Reg-No.: 01-2120770724-49	
	GHS/CLP: Eye Dam. 1: H318 - Acute Tox. 4: H302 - Repr. 2: H361d	
	SCL [%]: >= 3,8: Repr. 2: H361	

Comment on component

parts

All chemical substances in this material are included on or exempted

from listing on the IECSC 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.

### **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.



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#### 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.

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)

#### 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



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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.

Cloths contaminated with product should not be kept in trouser

pockets.

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

Keep only in original container.

Prevent penetration into the ground.

Do not store together with food and animal food/diet.

Do not store together with oxidizing agents.

Keep container tightly closed.

### 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 (GB)

not applicable

### **DNEL**

Substance
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts, CAS: 85940-28-9
Industrial, dermal, Long-term - systemic effects, 9,6 mg/kg bw/d,
Industrial, inhalative, Long-term - systemic effects, 6,6 mg/m³,
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/m³,
Naphthenic acids, zinc salts, CAS: 12001-85-3
Industrial, dermal, Long-term - systemic effects, 3.3 mg/kg bw/d (AF=30),
Industrial, inhalative, Long-term - systemic effects, 1.18 mg/m³ (AF=75),
general population, inhalative, Long-term - systemic effects, 0.29 mg/m³ (AF=150),
general population, oral, Long-term - systemic effects, 0.17 ng/kg bw/d (AF=600),
general population, dermal, Long-term - systemic effects, 1.7 mg/kg bw/d (AF=60),
Dilithium tetraborate, CAS: 12007-60-2
Industrial, dermal, Long-term - systemic effects, 333 mg/kg bw/D (AF= 30),
Industrial, inhalative, Long-term - systemic effects, 7.1 mg/m³ (AF= 12.5),
general population, oral, Long-term - systemic effects, 0.83 mg/kg bw/D (AF= 60),
general population, dermal, Long-term - systemic effects, 166 mg/kg bw/D (AF= 60),
general population, inhalative, Long-term - systemic effects, 1.74 mg/m³ (AF= 25),

### **PNEC**

Substance
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts, CAS: 85940-28-9
soil, 15,7 mg/kg dw,
sediment (seawater), 1,93 mg/kg dw,
sediment (freshwater), 19,3 mg/kg dw,
sewage treatment plants (STP), 100 mg/l (AF=100),
seawater, 0,0002 mg/l (AF=10000),
freshwater, 0,002 mg/l (AF=1000),
Naphthenic acids, zinc salts, CAS: 12001-85-3
soil, 0.001 mg/kg dw,



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sediment (seawater), 0.002 mg/kg dw,	
sediment (freshwater), 0.015 mg/kg dw,	
sewage treatment plants (STP), 689.7 µg/L (AF= 1),	
seawater, 0 mg/L (AF= 10000),	
freshwater, 0.004 mg/L (AF= 1000),	
Dilithium tetraborate, CAS: 12007-60-2	_
sewage treatment plants (STP), mg/L (AF= 10),	

#### 8.2 **Exposure controls**

Additional advice on system Ensure adequate ventilation on workstation.

design

Eye protection Safety glasses. (EN 166:2001)

The details concerned are recommendations. Please contact the **Hand protection** 

glove supplier for further information.

In full contact:

> 0,4 mm: Butyl rubber, >120 min (EN 374-1/-2/-3).

Skin protection light protective clothing

Avoid contact with eyes and skin. Other **Respiratory protection** Not required under normal conditions.

Thermal hazards No information available.

of the environmental

exposition

Delimitation and monitoring 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] not applicable
Flash point [°C] not applicable

Flammability (solid, gas) [°C] No information available.

Lower explosion limit not applicable

Upper explosion limit not applicable

Oxidising properties no

Vapour pressure/gas not determined

pressure [kPa]

**Density [g/ml]** ca. 0,9 (DIN 51757) (25°C / 77,0°F)

Bulk density [kg/m³] not applicable

Solubility in water virtually insoluble

Solubility other solvents No information available.

Partition coefficient [n- No information available.

octanol/water]

Kinematic viscosityNLGI 3-4Relative vapour densitynot applicableEvaporation speednot applicable

Melting point [°C] No information available.

Auto-ignition temperature No information available.

Decomposition temperature No information available.

[°C]

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.

### 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 vapours may be released.

### 10.4 Conditions to avoid

Strong heating.

### 10.5 Incompatible materials

Strong oxidizing agent.

Acids

Strong basic compounds

### 10.6 Hazardous decomposition products

No hazardous decomposition products known.



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LD50, oral, Rat, 300 - 2000 mg/kg bw,

LD50, dermal, Rat, > 2000 mg/kg bw,

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### 11.1 Information on toxicological effects

### **Acute oral toxicity**

Product
oral, Based on the available information, the classification criteria are not fulfilled.,
Substance
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts, CAS: 85940-28-9
LD50, oral, Rat, 3080 mg/kg bw,
Naphthenic acids, zinc salts, CAS: 12001-85-3
LD50, oral, Rat, > 2000 mg/kg,
Dilithium tetraborate, CAS: 12007-60-2

# Acute dermal toxicity Product

dermal, Based on the available information, the classification criteria are not fulfilled.,
Substance
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts, CAS: 85940-28-9
LD50, dermal, Rabbit, > 20 000 mg/kg bw,
Dilithium tetraborate, CAS: 12007-60-2

### Acute inhalational toxicity

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

	Substance
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc CAS: 85940-28-9	
	LC50, inhalation (vapour ), Rat, > 2,3 mg/L/4h,

Serious eye damage/irritation

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

Skin corrosion/irritation

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



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Respiratory or skin sensitisation

Toxicological data of complete product are not available.

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.

SCL: >= 3.8% Rep.2 (CAS 12007-60-2)

**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** 

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.

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SECTION 12: Ecological information	

### 12.1 Toxicity

Product
Based on the available information, the classification criteria are not fulfilled.,
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Substance
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts, CAS: 85940-28-9
LL50, (96h), Oncorhynchus mykiss, 4,5 mg/l,
Naphthenic acids, zinc salts, CAS: 12001-85-3
EC50, (72h), Algae, 4 mg/L,
EL50, (48h), Daphnia magna, 35 mg/L,
LL50, (96h), fish, 100 mg/L,
Dilithium tetraborate, CAS: 12007-60-2
LC50, (96h), fish, 100 mg/L,
EC50, (48h), Daphnia magna, 100 mg/L,
IC50, (72h), Algae, 100 mg/L,
NOEC, (72h), Algae, 32 mg/L,

### 12.2 Persistence and degradability

Behaviour in environment not determined

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.



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#### 12.7 Other adverse effects

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

For recycling, consult manufacturer.

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

Transport by land according not applicable to ADR/RID

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG

not applicable

Air transport in accordance not applicable

with IATA



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### 14.2 UN proper shipping name

Transport by land according NO DANGEROUS GOODS to ADR/RID

Inland navigation (ADN) NO DANGEROUS GOODS

Marine transport in accordance with IMDG

NOT CLASSIFIED AS "DANGEROUS GOODS"

Air transport in accordance NOT CLASSIFIED AS "DANGEROUS GOODS"

with IATA

### 14.3 Transport hazard class(es)

Transport by land according not applicable to ADR/RID

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG

not applicable

Air transport in accordance not applicable

with IATA

### 14.4 Packing group

**Transport by land according** not applicable **to ADR/RID** 

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG

not applicable

Air transport in accordance not applicable

with IATA



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#### 14.5 Environmental hazards

Transport by land according no to ADR/RID

Inland navigation (ADN) no

Marine transport in accordance with IMDG

no

Air transport in accordance no with IATA

#### 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

**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

**TRANSPORT-** ADR (2019); IMDG-Code (2019, 39. Amdt.); IATA-DGR (2020)

**NATIONAL REGULATIONS** 

(GB):

EH40/2005 Workplace exposure limits (Second edition, published

December 2011).

- Observe employment restrictions for people

no

- VOC (2010/75/CE) 0 %

### 15.2 Chemical safety assessment

not applicable



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**SECTION 16: Other information** 

### 16.1 Hazard statements (SECTION 3)

H361d Suspected of damaging the unborn child.

H302 Harmful if swallowed.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

H315 Causes skin irritation.



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#### 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



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16.3 Other information

Classification procedure Skin Sens. 1B: H317 May cause an allergic skin reaction. (Calculation

method)

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

effects. (Calculation method)

Modified position none