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

1.1 Product identifier

Trade name : GEAR LUBRICANT OIL TRIATHLON 80W - 20 L

Product code : 0897480003

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Sub- : Lubricants and lubricant additives, Hydraulic fluid

stance/Mixture Gear oil

Professional use product

Recommended restrictions

on use

Not applicable

1.3 Details of the supplier of the safety data sheet

Company : Adolf Wuerth GmbH & Co. KG

Reinhold-Würth-Str. 12-17

74653 Künzelsau

Telephone : +49 794015 0

Telefax : +49 794015 10 00

E-mail address of person

responsible for the SDS

isi@wuerth.com

1.4 Emergency telephone number

+49 (0)6132 - 84463

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Long-term (chronic) aquatic hazard, Category 2 H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

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Hazard pictograms :

¥2>

Hazard statements : H411 Toxic to aquatic life with long lasting effects.

Precautionary statements : Prevention:

P273 Avoid release to the environment.

Response:

P391 Collect spillage.

Additional Labelling

EUH208 Contains Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid

with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched).

May produce an allergic reaction.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)	Not Assigned 01-2119493620-38	Acute Tox. 4; H302 Eye Dam. 1; H318 Skin Sens. 1B; H317 Aquatic Chronic 2; H411 Acute toxicity estimate Acute oral toxicity:	>= 0,25 - < 1

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		2.000 mg/kg	
C16-18-(Even numbered, saturated and unsaturated)-alkylamines	1213789-63-9	Acute Tox. 4; H302 Skin Corr. 1B; H314	>= 0,25 - < 1
ed and unsaturated)-aikyramines	01-2119473797-19	Eye Dam. 1; H318 STOT SE 3; H335 STOT RE 2; H373 (Liver, Immune system, Gastrointestinal tract) Asp. Tox. 1; H304 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	
		M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 10	
		Acute toxicity esti- mate	
		Acute oral toxicity: 1.689 mg/kg	

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

Protection of first-aiders : No special precautions are necessary for first aid responders.

If inhaled : If inhaled, remove to fresh air.

Get medical attention if symptoms occur.

In case of skin contact : Wash with water and soap as a precaution.

Get medical attention if symptoms occur.

In case of eye contact : Flush eyes with water as a precaution.

Get medical attention if irritation develops and persists.

If swallowed, DO NOT induce vomiting.

Get medical attention if symptoms occur. Rinse mouth thoroughly with water.

4.2 Most important symptoms and effects, both acute and delayed

Risks : May produce an allergic reaction.

4.3 Indication of any immediate medical attention and special treatment needed

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Treatment : Treat symptomatically and supportively.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Water spray

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

Exposure to combustion products may be a hazard to health.

Hazardous combustion prod: :

ucts

Carbon oxides

5.3 Advice for firefighters

Special protective equipment:

for firefighters

Wear self-contained breathing apparatus for firefighting if nec-

essary. Use personal protective equipment.

Specific extinguishing meth-

ods

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment. Use water spray to cool unopened containers.

Remove undamaged containers from fire area if it is safe to do

SO.

Evacuate area.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Follow safe handling advice (see section 7) and personal pro-

tective equipment recommendations (see section 8).

6.2 Environmental precautions

Environmental precautions : Avoid release to the environment.

Prevent further leakage or spillage if safe to do so.

Prevent spreading over a wide area (e.g. by containment or oil

parriers).

Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages

cannot be contained.

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6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material.

For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absor-

bent.

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to deter-

mine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Technical measures : See Engineering measures under EXPOSURE

CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : Use only with adequate ventilation.

Advice on safe handling : Avoid prolonged or repeated contact with skin.

Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure as-

sessment

Take care to prevent spills, waste and minimize release to the

environment.

Hygiene measures : If exposure to chemical is likely during typical use, provide eye

flushing systems and safety showers close to the working place. When using do not eat, drink or smoke. Wash contami-

nated clothing before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

: Keep in properly labelled containers. Store in accordance with

the particular national regulations.

Advice on common storage : Do not store with the following product types:

Strong oxidizing agents

Gases

Storage class (TRGS 510) : 10

7.3 Specific end use(s)

Specific use(s) : No data available

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Residual oils (pe- troleum), hy- drotreated	64742-57-0	AGW (Vapour and aerosols)	5 mg/m3	DE TRGS 900
	Peak-limit: excursion factor (category): 4;(II)			
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
Distillates (petrole- um), solvent re- fined heavy paraf- finic	64741-88-4	AGW (Vapour and aerosols)	5 mg/m3	DE TRGS 900
	Peak-limit: excursion factor (category): 4;(II)			
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006

Substance name	End Use	Exposure routes	Potential health effects	Value
Reaction products of bis(4-methylpentan-2- yl)dithiophosphoric acid with phosphorus oxide, propylene ox- ide and amines, C12- 14-alkyl (branched)	Workers	Inhalation	Long-term systemic effects	
	Workers	Skin contact	Long-term systemic effects	12,5 mg/kg bw/day
	Workers	Skin contact	Long-term local ef- fects	0,16 mg/cm2
	Workers	Skin contact	Acute local effects	0,16 mg/cm2
	Consumers	Inhalation	Long-term systemic effects	1,09 mg/m3
	Consumers	Skin contact	Long-term systemic effects	6,25 mg/kg bw/day
	Consumers	Skin contact	Long-term local ef- fects	0,16 mg/cm2
	Consumers	Skin contact	Acute local effects	0,16 mg/cm2
	Consumers	Ingestion	Long-term systemic effects	0,25 mg/kg bw/day
C16-18-(Even numbered, saturated and unsaturated)-alkylamines	Workers	Inhalation	Long-term systemic effects	0,38 mg/m3

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Workers	Inhalation	Long-term local effects	1 mg/m3
Workers	Inhalation	Acute local effects	1 mg/m3
Consumers	Inhalation	Long-term systemic effects	0,035 mg/m3
Consumers	Ingestion	Long-term systemic effects	0,04 mg/kg bw/day

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006

Substance name	Environmental Compartment	Value
Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)	Fresh water	2,4 μg/l
	Marine water	0,00024 mg/l
	Freshwater - intermittent	0,15 mg/l
	Sewage treatment plant	24,33 mg/l
	Fresh water sediment	0,0129 mg/kg dry weight (d.w.)
	Marine sediment	0,00129 mg/kg dry weight (d.w.)
	Soil	0,0017 mg/kg dry weight (d.w.)
	Oral (Secondary Poisoning)	10 mg/kg food
	Marine water - intermittent	15 μg/l
C16-18-(Even numbered, saturated and unsaturated)-alkylamines	Fresh water	0,26 μg/l
	Freshwater - intermittent	1,6 μg/l
	Marine water	0,026 μg/l
	Sewage treatment plant	550 μg/l
	Fresh water sediment	3,76 mg/kg dry weight (d.w.)
	Marine sediment	0,376 mg/kg dry weight (d.w.)
	Soil	10 mg/kg dry weight (d.w.)
Distillates (petroleum), solvent refined heavy paraffinic	Oral (Secondary Poisoning)	9,33 mg/kg food
Residual oils (petroleum), hy- drotreated	Oral (Secondary Poisoning)	9,33 mg/kg food

8.2 Exposure controls

Engineering measures

Ensure adequate ventilation, especially in confined areas. Minimize workplace exposure concentrations.

Personal protective equipment

Eye/face protection : Please follow all applicable local/national requirements when

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selecting protective measures for a specific workplace.

Wear the following personal protective equipment:

Safety glasses

Always wear eye protection when the potential for inadvertent

eye contact with the product cannot be excluded.

Equipment should conform to DIN EN 166

Hand protection

Material : Nitrile rubber
Break through time : >= 240 min
Glove thickness : >= 0,5 mm

Directive : Equipment should conform to DIN EN 374

Wearing time : <= 120 min

Remarks : Choose gloves to protect hands against chemicals depending

on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

Skin and body protection : Skin should be washed after contact.

Respiratory protection : If adequate local exhaust ventilation is not available or expo-

sure assessment demonstrates exposures outside the rec-

ommended guidelines, use respiratory protection. Equipment should conform to DIN EN 14387

Filter type : Combined particulates and organic vapour type (A-P)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : liquid

Colour : brown

Odour : characteristic

Odour Threshold : No data available

Melting point/freezing point : No data available

Initial boiling point and boiling : No data available

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range

Flammability (solid, gas) : Not applicable

Flammability (liquids) : Ignitable (see flash point)

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower :

flammability limit

No data available

Flash point : 210 - 212 °C

Auto-ignition temperature : No data available

Decomposition temperature : No data available

pH : substance/mixture is non-soluble (in water)

Viscosity

Viscosity, kinematic : 96 - 142 mm2/s (40 °C)

11,4 - 14,3 mm2/s (100 °C)

Solubility(ies)

Water solubility : insoluble

Partition coefficient: n-

octanol/water

Not applicable

Vapour pressure : No data available

Density : 0,89 g/cm³

Relative vapour density : No data available

Particle characteristics

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Particle size : Not applicable

9.2 Other information

Explosives : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Evaporation rate : No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Not classified as a reactivity hazard.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Can react with strong oxidizing agents.

10.4 Conditions to avoid

Conditions to avoid : None known.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

10.6 Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 11: Toxicological information

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

Information on likely routes of : Inhalation exposure Skin contact

Ingestion

Eye contact

Acute toxicity

Not classified based on available information.

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Components:

Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)

:

Acute oral toxicity : LD50 (Rat): 2.000 mg/kg

C16-18-(Even numbered, saturated and unsaturated)-alkylamines:

Acute oral toxicity : LD50 (Rat): 1.689 mg/kg

Method: OECD Test Guideline 401

Skin corrosion/irritation

Not classified based on available information.

Components:

Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)

:

Species : Rabbit

Result : No skin irritation

C16-18-(Even numbered, saturated and unsaturated)-alkylamines:

Species : Rabbit

Method : OECD Test Guideline 404

Result : Corrosive after 3 minutes to 1 hour of exposure

Serious eye damage/eye irritation

Not classified based on available information.

Components:

Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)

:

Species : Rabbit

Result : Irreversible effects on the eye

C16-18-(Even numbered, saturated and unsaturated)-alkylamines:

Result : Irreversible effects on the eye Remarks : Based on skin corrosivity.

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

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Respiratory sensitisation

Not classified based on available information.

Components:

Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)

:

Test Type : Local lymph node assay (LLNA)

Exposure routes : Skin contact Species : Mouse

Method : OECD Test Guideline 429

Result : positive

Assessment : Probability or evidence of low to moderate skin sensitisation

rate in humans

Germ cell mutagenicity

Not classified based on available information.

Components:

Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)

:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Method: OECD Test Guideline 476

Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay) Species: Mouse

Application Route: Intraperitoneal injection

Method: OECD Test Guideline 474

Result: negative

C16-18-(Even numbered, saturated and unsaturated)-alkylamines:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Method: OECD Test Guideline 476

Result: negative

Test Type: Chromosome aberration test in vitro

Result: negative

Genotoxicity in vivo : Test Type: Mammalian bone marrow sister chromatid ex-

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change

Species: Mouse

Application Route: Ingestion

Result: negative

Carcinogenicity

Not classified based on available information.

Components:

C16-18-(Even numbered, saturated and unsaturated)-alkylamines:

Species : Rat
Application Route : Ingestion
Exposure time : 2 Years
Result : negative

Remarks : Based on data from similar materials

Reproductive toxicity

Not classified based on available information.

Components:

Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)

:

Effects on fertility : Test Type: Reproduction/Developmental toxicity screening

test

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 421

Result: negative

Effects on foetal develop-

ment

Test Type: Reproduction/Developmental toxicity screening

test

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 421

Result: negative

C16-18-(Even numbered, saturated and unsaturated)-alkylamines:

Effects on foetal develop: T

ment

Test Type: Embryo-foetal development

Species: Rat

Application Route: Ingestion

Result: negative

STOT - single exposure

Not classified based on available information.

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Components:

C16-18-(Even numbered, saturated and unsaturated)-alkylamines:

Assessment : May cause respiratory irritation.

STOT - repeated exposure

Not classified based on available information.

Components:

C16-18-(Even numbered, saturated and unsaturated)-alkylamines:

Exposure routes : Ingestion

Target Organs : Liver, Immune system, Gastrointestinal tract

Assessment : Shown to produce significant health effects in animals at con-

centrations of >10 to 100 mg/kg bw.

Repeated dose toxicity

Components:

Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)

:

Species: RatNOAEL: 150 mg/kgLOAEL: 500 mg/kgApplication Route: IngestionExposure time: 28 Days

C16-18-(Even numbered, saturated and unsaturated)-alkylamines:

Species : Rat

NOAEL : 3,25 mg/kg LOAEL : 12,5 mg/kg Application Route : Ingestion Exposure time : 28 Days

Method : OECD Test Guideline 407

Aspiration toxicity

Not classified based on available information.

Components:

C16-18-(Even numbered, saturated and unsaturated)-alkylamines:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

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11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

SECTION 12: Ecological information

12.1 Toxicity

Components:

Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)

:

Toxicity to fish : LL50 (Pimephales promelas (fathead minnow)): 8,5 mg/l

Exposure time: 96 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EL50 (Daphnia magna (Water flea)): 91,4 mg/l

Exposure time: 48 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EL50 (Pseudokirchneriella subcapitata (green algae)): 15 mg/l

Exposure time: 96 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 201

NOELR (Pseudokirchneriella subcapitata (green algae)): 3,3

mg/l

Exposure time: 96 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50 (activated sludge): 2.433 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOELR: 0,12 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 211

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C16-18-(Even numbered, saturated and unsaturated)-alkylamines:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 0,11 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0,011 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

ErC50 (Selenastrum capricornutum (green algae)): 0,04 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 201

M-Factor (Acute aquatic tox-

icity)

10

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 0,013 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

M-Factor (Chronic aquatic

toxicity)

10

12.2 Persistence and degradability

Components:

Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)

•

Biodegradability : Result: Not readily biodegradable.

Biodegradation: 3,6 % Exposure time: 28 d

C16-18-(Even numbered, saturated and unsaturated)-alkylamines:

Biodegradability : Result: Not readily biodegradable.

Biodegradation: 66 % Exposure time: 28 d

Method: OECD Test Guideline 301B

12.3 Bioaccumulative potential

Components:

Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)

:

Partition coefficient: n- : log Pow: > 4

octanol/water Method: OECD Test Guideline 117

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C16-18-(Even numbered, saturated and unsaturated)-alkylamines:

Bioaccumulation : Species: Cyprinus carpio (Carp)

Bioconcentration factor (BCF): > 500 Method: OECD Test Guideline 305

Remarks: Based on data from similar materials

Partition coefficient: n- : log Pow: 7,5

octanol/water Remarks: Calculation

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

12.7 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Dispose of in accordance with local regulations.

According to the European Waste Catalogue, Waste Codes

are not product specific, but application specific.

Waste codes should be assigned by the user, preferably in

discussion with the waste disposal authorities.

Do not dispose of waste into sewer.

Contaminated packaging : Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

If not otherwise specified: Dispose of as unused product.

Waste Code : The following Waste Codes are only suggestions:

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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used product

13 02 08*, other engine, gear and lubricating oils

unused product

13 02 08*, other engine, gear and lubricating oils

uncleaned packagings

15 01 10*, packaging containing residues of or contaminated

by hazardous substances

SECTION 14: Transport information

14.1 UN number or ID number

ADN : UN 3082
ADR : UN 3082
RID : UN 3082
IMDG : UN 3082
IATA : UN 3082

14.2 UN proper shipping name

ADN : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(C16-18-(Even numbered, saturated and unsaturated)-

alkylamines)

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(C16-18-(Even numbered, saturated and unsaturated)-

alkylamines)

RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(C16-18-(Even numbered, saturated and unsaturated)-

alkylamines)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(C16-18-(Even numbered, saturated and unsaturated)-

alkylamines)

IATA : Environmentally hazardous substance, liquid, n.o.s.

(C16-18-(Even numbered, saturated and unsaturated)-

alkylamines)

14.3 Transport hazard class(es)

Class Subsidiary risks

 ADN
 : 9

 ADR
 : 9

 RID
 : 9

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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IMDG : 9
IATA : 9

14.4 Packing group

ADN

Packing group : III
Classification Code : M6
Hazard Identification Number : 90
Labels : 9

ADR

Packing group : III
Classification Code : M6
Hazard Identification Number : 90
Labels : 9
Tunnel restriction code : (-)

RID

Packing group : III
Classification Code : M6
Hazard Identification Number : 90
Labels : 9

IMDG

Packing group : III Labels : 9

EmS Code : F-A, S-F

IATA (Cargo)

Packing instruction (cargo : 964

aircraft)

Packing instruction (LQ) : Y964
Packing group : III

Labels : Miscellaneous

IATA (Passenger)

Packing instruction (passen: 964

ger aircraft)

Packing instruction (LQ) : Y964
Packing group : III

Labels : Miscellaneous

14.5 Environmental hazards

ADN

Environmentally hazardous : yes

ADR

Environmentally hazardous : yes

RID

Environmentally hazardous : yes

IMDG

Marine pollutant : yes

IATA (Passenger)

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Environmentally hazardous ves

IATA (Cargo)

Environmentally hazardous yes

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Remarks : Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

Conditions of restriction for the following entries should be considered: Number on list 75: If you intend to use this product as tattoo ink, please contact your vendor.

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

Number on list 3

Substance(s) or mixture(s) are listed here according to their appearance in the regulation, irrespective of their use/purpose or the conditions of the restriction. Please refer to the conditions in corresponding Regulation to determine whether an entry is applicable to the placing on the market or not.

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

Not applicable

Regulation (EU) No 2024/590 on substances that deplete the ozone layer

Not applicable

Regulation (EU) 2019/1021 on persistent organic pollu-

tants (recast)

Not applicable

Regulation (EU) No 649/2012 of the European Parliament and the Council concerning the export and import

Not applicable

of dangerous chemicals

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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REACH - List of substances subject to authorisation : Not applicable

(Annex XIV)

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of

major-accident hazards involving dangerous substances.

Quantity 1 Quantity 2

E2 ENVIRONMENTAL 200 t 500 t

HAZARDS

Water hazard class (Germa-

ny)

WGK 1 slightly hazardous to water

Classification according to AwSV, Annex 1 (5.2)

TA Luft List (Germany) : 5.2.1: Total dust:

Not applicable

5.2.2: Inorganic substances in powdered form:

Not applicable

5.2.4: Inorganic substances in gaseous form:

Not applicable

5.2.5: Organic Substances:

Not applicable

5.2.7.1.1: Carcinogenic substance:

Not applicable

5.2.7.1.1: Quartz fine dust PM4:

Not applicable

5.2.7.1.1: Formaldehyde:

Not applicable 5.2.7.1.1: fibres: Not applicable

5.2.7.1.2: Germ cell mutagens:

Not applicable

5.2.7.1.3: Substances toxic to reproduction:

Not applicable

5.2.7.2: Poorly degradable, easily enrichable and highly toxic

organic substances: Not applicable

Volatile organic compounds

Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) Volatile organic compounds (VOC) content: 2,72 %

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Other information : Items where changes have been made to the previous version

are highlighted in the body of this document by two vertical

lines.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Full text of H-Statements

H302 : Harmful if swallowed.

H304 : May be fatal if swallowed and enters airways.
H314 : Causes severe skin burns and eye damage.

H317 : May cause an allergic skin reaction.
H318 : Causes serious eye damage.
H335 : May cause respiratory irritation.

H373 : May cause damage to organs through prolonged or repeated

exposure.

H400 : Very toxic to aquatic life.

H410 : Very toxic to aquatic life with long lasting effects.H411 : Toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox. : Acute toxicity

Aquatic Acute : Short-term (acute) aquatic hazard Aquatic Chronic : Long-term (chronic) aquatic hazard

Asp. Tox. : Aspiration hazard
Eye Dam. : Serious eye damage
Skin Corr. : Skin corrosion
Skin Sens. : Skin sensitisation

STOT RE : Specific target organ toxicity - repeated exposure STOT SE : Specific target organ toxicity - single exposure

DE TRGS 900 : Germany. TRGS 900 - Occupational exposure limit values.

DE TRGS 900 / AGW : Time Weighted Average

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways: ADR - Agreement concerning the International Carriage of Dangerous Goods by Road: AIIC - Australian Inventory of Industrial Chemicals: ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA -European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals: OECD - Organization for Economic Co-operation and Development: OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Sources of key data used to compile the Safety Data Sheet

Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen-

Classification procedure:

cy, http://echa.europa.eu/

Classification of the mixture:

Aquatic Chronic 2 H411 Calculation method

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

DE / EN