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

1.1 Product identifier

Product name : WOLFRACOAT C

Article-No. : 099113

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

Use of the Sub- :

stance/Mixture

: Lubricant

Recommended restrictions

on use

Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Company : Klüber Lubrication München

Geisenhausenerstr. 7 81379 München Deutschland

Tel: +49 (0) 89 7876 0 Fax: +49 (0) 89 7876 333 info@klueber.com

E-mail address of person : mcm@

responsible for the SDS

: mcm@klueber.com

Material Compliance Management

National contact : Klüber Lubrication Deutschland

Geisenhausenerstraße 7

81379 München Deutschland

Tel.: +49 89 7876 0 Fax: +49 89 7876 565

customer.service.de@klueber.com

www.klueber.com

1.4 Emergency telephone number

Emergency telephone num-

: +49 89 7876 700 (24 hrs)

ber

### **SECTION 2: Hazards identification**

### 2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

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Short-term (acute) aquatic hazard, Cate-

gory 1

H400: Very toxic to aquatic life.

Long-term (chronic) aquatic hazard, Cat-

egory 1

H410: Very toxic to aquatic life with long lasting

effects.

#### 2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms

Signal word : Warning

Hazard statements : H410 Very 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 N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-

bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-

2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-

methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

. May produce an allergic reaction.

EUH212 Warning! Hazardous respirable dust may be formed when used. Do not breathe

dust.

### 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.



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# **SECTION 3: Composition/information on ingredients**

3.2 Mixtures

Chemical nature : Synthetic hydrocarbon oil

silicate solid lubricant

Components

Components				
Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	specific concentration limit M-Factor Notes Acute toxicity estimate	Concentration (% w/w)
copper	7440-50-8 231-159-6 029-019-01-X 01-2119480154-42- XXXX	Acute Tox.4; H302 Aquatic Acute1; H400 Aquatic Chronic2; H411	M-Factor: 10/1	>= 2,5 - < 10
copper flakes (coated with aliphatic acid)	7440-50-8 029-019-01-X 01-2119480154-42- XXXX	Acute Tox.4; H302 Acute Tox.3; H331 Eye Irrit.2; H319 Aquatic Acute1; H400 Aquatic Chronic1; H410	M-Factor: 10/10	>= 2,5 - < 10
Amines, N-C16-C18-alkyl-(evennumbered, C18 unsaturated) propane-1,3-diaminium di[(9Z)-octadec-9-enoate]	800-362-7 01-2119974117-33- XXXX	Skin Irrit.2; H315 Eye Irrit.2; H319 STOT RE2; H373 Aquatic Acute1; H400 Aquatic Chronic2; H411	M-Factor: 10/1	>= 1 - < 2,5
N,N-bis(2-ethylhexyl)- 5-methyl-1H- benzotriazole-1- methylamine, N,N- bis(2-ethylhexyl)-4- methyl-1H- benzotriazole-1- methylamine, 2H- Benzotriazole-2- methanamine, N,N- bis(2-ethylhexyl)-4- methyl-, 2H- Benzotriazole-2- methanamine, N,N- bis(2-ethylhexyl)-5-	939-700-4 01-2119982395-25- XXXX	Skin Irrit.2; H315 Skin Sens.1B; H317 Aquatic Acute1; H400 Aquatic Chronic2; H411	M-Factor: 1/	>= 0,1 - < 0,25

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methyl-, 1H- Benzotriazole-1- methanamine, N,N- bis(2-ethylhexyl)-6- methyl-(Mixture)				
Substances with a work	place exposure limit:			
Graphite	7782-42-5 231-955-3 01-2119486977-12- XXXX	Not classified		>= 1 - < 10
aluminium powder (stabilised)	7429-90-5 231-072-3 013-002-00-1 01-2119529243-45- XXXX	Flam. Sol.1; H228	Note T	>= 1 - < 10
titanium dioxide; [in powder form contain- ing <1 % of particles with aerodynamic diameter ≤ 10 µm]	13463-67-7 236-675-5 01-2119489379-17- XXXX	Not classified		>= 1 - < 10

For explanation of abbreviations see section 16.

#### **SECTION 4: First aid measures**

### 4.1 Description of first aid measures

If inhaled : Remove person to fresh air. If signs/symptoms continue, get

medical attention.

Keep patient warm and at rest.

If unconscious, place in recovery position and seek medical

advice.

Keep respiratory tract clear.

If breathing is irregular or stopped, administer artificial respira-

tion.

In case of skin contact : Take off all contaminated clothing immediately.

Wash off immediately with soap and plenty of water.

Get medical attention immediately if irritation develops and

persists.

Wash clothing before reuse.

Thoroughly clean shoes before reuse.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,

for at least 10 minutes.

If eye irritation persists, consult a specialist.



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If swallowed : Move the victim to fresh air.

If unconscious, place in recovery position and seek medical

advice.

Keep respiratory tract clear.

Do not induce vomiting without medical advice.

Obtain medical attention.

Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Allergic appearance

Risks : May cause an allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : The first aid procedure should be established in consultation

with the doctor responsible for industrial medicine.

### **SECTION 5: Firefighting measures**

5.1 Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or car-

bon dioxide.

Unsuitable extinguishing

media

High volume water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion prod: :

ucts

Carbon oxides

Nitrogen oxides (NOx)

Metal oxides

5.3 Advice for firefighters

Special protective equipment :

for firefighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment. Exposure to decomposi-

tion products may be a hazard to health.

Further information : Standard procedure for chemical fires.

Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

### **SECTION 6: Accidental release measures**

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas.

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Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release

(dust).

Do not breathe vapours, aerosols.

Refer to protective measures listed in sections 7 and 8.

### 6.2 Environmental precautions

Environmental precautions : Do not allow contact with soil, surface or ground water.

If the product contaminates rivers and lakes or drains inform

respective authorities.

#### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Clean up promptly by sweeping or vacuum.

Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For personal protection see section 8.

### **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Advice on safe handling : Do not breathe vapours or spray mist.

Avoid contact with skin and eyes. For personal protection see section 8.

Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being

useu.

Smoking, eating and drinking should be prohibited in the ap-

plication area.

Wash hands and face before breaks and immediately after

handling the product.

Do not get in eyes or mouth or on skin.

Do not get on skin or clothing.

Do not ingest. Do not repack.

Do not re-use empty containers.

These safety instructions also apply to empty packaging which

may still contain product residues. Keep container closed when not in use. Avoid inhalation of vapour or mist.

Do not use in areas without adequate ventilation.

Avoid contact with skin and eyes. For personal protection see section 8.

Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.



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Smoking, eating and drinking should be prohibited in the ap-

plication area.

Wash hands and face before breaks and immediately after

handling the product.

Do not get in eyes or mouth or on skin.

Do not get on skin or clothing.

Do not ingest. Do not repack.

These safety instructions also apply to empty packaging which

may still contain product residues. Keep container closed when not in use.

Hygiene measures : Wash face, hands and any exposed skin thoroughly after

handling.

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

Requirements for storage areas and containers

Store in original container. Keep container closed when not in use. Keep in a dry, cool and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in accordance with the particular national regulations. Keep in properly labelled containers.

Storage class (TRGS 510) : 11, Combustible Solids

7.3 Specific end use(s)

Specific use(s) : Specific instructions for handling, not required.

### **SECTION 8: Exposure controls/personal protection**

### 8.1 Control parameters

### **Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Graphite	7782-42-5	AGW (Inhalable fraction)	10 mg/m3	DE TRGS 900 (2014-04-02)
	Peak-limit: ex	cursion factor (categ	ory): 2;(II)	
		Further information: When there is compliance with the OEL and biological		nd biological
	tolerance valu	ies, there is no risk c	of harming the unborn child	
		AGW (Alveolate fraction)	1,25 mg/m3	DE TRGS 900 (2014-04-02)
	Peak-limit: excursion factor (category): 2;(II)			
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
aluminium powder (stabilised)	7429-90-5	AGW (Inhalable fraction)	10 mg/m3	DE TRGS 900



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1		1	1	(2014-04-02)	
	Peak-limit: ex	cursion factor (categ	ory): 2;(II)	,	
	Further information: When there is compliance with the OEL and biological				
	tolerance values, there is no risk of harming the unborn child				
		AGW (Alveolate	1,25 mg/m3	DE TRGS	
		fraction)		900	
				(2014-04-02)	
		cursion factor (categ			
	Further information: When there is compliance with the OEL and biological				
	tolerance values, there is no risk of harming the unborn child				
Graphite	7782-42-5	AGW (Inhalable	10 mg/m3	DE TRGS	
		fraction)		900	
				(2014-04-02)	
		cursion factor (categ			
			s compliance with the OEL a	nd biological	
	tolerance valu		of harming the unborn child		
		AGW (Alveolate	1,25 mg/m3	DE TRGS	
		fraction)		900	
				(2014-04-02)	
		cursion factor (categ			
	Further information: When there is compliance with the OEL and biological				
			of harming the unborn child		
aluminium powder	7429-90-5	AGW (Inhalable	10 mg/m3	DE TRGS	
(stabilised)		fraction)		900	
				(2014-04-02)	
	Peak-limit: excursion factor (category): 2;(II)  Further information: When there is compliance with the OEL and biological				
	tolerance valu		of harming the unborn child	<b>.</b>	
		AGW (Alveolate	1,25 mg/m3	DE TRGS	
		fraction)		900	
				(2014-04-02)	
		cursion factor (categ			
			compliance with the OEL a	nd biological	
			of harming the unborn child	T	
titanium dioxide; [in	13463-67-7	AGW (Inhalable	10 mg/m3	DE TRGS	
powder form con-		fraction)	(Titanium dioxide)	900	
taining <1 % of				(2014-04-02)	
particles with aer-					
odynamic diameter					
≤ 10 µm]	Deal Park		]		
		cursion factor (categ		a al la la la a l' c a l	
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child				
	tolerance valu			DE TROO	
		AGW (Alveolate	1,25 mg/m3	DE TRGS	
		fraction)	(Titanium dioxide)	900	
	(2014-04-02)				
	Peak-limit: excursion factor (category): 2;(II)  Further information: When there is compliance with the OEL and biological				
				na biological	
	tolerance values, there is no risk of harming the unborn child				

### **Biological occupational exposure limits**

Substance name CA	AS-No.   Control	parameters   Sampli	ng time	Basis
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### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Benzene, mono-C10- 13-alkyl derivs., distn. residues	Workers	Inhalation	Long-term systemic effects	3,2 mg/m3
	Workers	Skin contact	Long-term systemic effects	4,3 mg/kg bw/day
copper	Workers	Inhalation	Long-term systemic effects	20 mg/m3
	Workers	Skin contact	Long-term systemic effects	137 mg/kg
	Workers	Skin contact	Acute systemic effects	237 mg/kg
Graphite	Workers	Inhalation	Long-term systemic effects	1,2 mg/m3
aluminium powder (stabilised)	Workers	Inhalation	Long-term systemic effects	3,72 mg/m3
	Workers	Inhalation	Long-term local ef- fects	3,72 mg/m3
Amines, N-C16-C18- alkyl-(evennumbered, C18 unsaturated) propane-1,3- diaminium di[(9Z)- octadec-9-enoate]	Workers	Skin contact	Long-term systemic effects	0,04 mg/kg
	Workers	Inhalation	Long-term systemic effects	0,29 mg/m3
N,N-bis(2-ethylhexyl)- 5-methyl-1H- benzotriazole-1- methylamine, N,N- bis(2-ethylhexyl)-4- methyl-1H- benzotriazole-1- methylamine, 2H- Benzotriazole-2- methanamine, N,N- bis(2-ethylhexyl)-4- methyl-, 2H- Benzotriazole-2- methanamine, N,N- bis(2-ethylhexyl)-5- methyl-, 1H- Benzotriazole-1- methanamine, N,N- bis(2-ethylhexyl)-6- methyl-(Mixture)	Industrial use	Inhalation	Long-term systemic effects	1,3 mg/m3

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Industrial use	Skin contact	Long-term systemic effects	0,4 mg/kg

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

Substance name	Environmental Compartment	Value
Benzene, mono-C10-13-alkyl	Fresh water	0,001 mg/l
derivs., distn. residues		_
	Intermittent use/release	0,001 mg/l
	Marine water	0 mg/l
	Microbiological Activity in Sewage Treatment Systems	2 mg/l
	Fresh water sediment	1,65 mg/kg
	Marine sediment	0,165 mg/kg
	Soil	0,329 mg/kg
copper	Fresh water	0,0078 mg/l
	Marine water	0,0052 mg/l
	Sewage treatment plant	0,230 mg/l
	Fresh water sediment	87 mg/kg
	Marine sediment	676 mg/kg
	Soil	65 mg/kg
copper flakes (coated with aliphatic acid)	Fresh water	0,0078 mg/l
,	Marine water	0,0052 mg/l
	Fresh water sediment	87 mg/kg
	Marine sediment	676 mg/kg
	Microbiological Activity in Sewage Treatment Systems	0,230 mg/l
	Soil	65,5 mg/kg
aluminium powder (stabilised)	Fresh water	0,0749 mg/l
	Sewage treatment plant	20 mg/l
Amines, N-C16-C18-alkyl- (evennumbered, C18 unsaturat- ed) propane-1,3-diaminium di[(9Z)-octadec-9-enoate]	Fresh water	0,00638 mg/l
	Marine water	0,000638 mg/l
	Intermittent use/release	0,00509 mg/l
	Microbiological Activity in Sewage Treatment Systems	98,6 mg/l
	Fresh water sediment	204 mg/kg
	Marine sediment	20,4 mg/kg
	Soil	9,93 mg/kg
N,N-bis(2-ethylhexyl)-5-methyl- 1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl- 1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2- methanamine, N,N-bis(2- ethylhexyl)-4-methyl-, 2H- Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-	Fresh water	0,000976 mg/l

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methanamine, N,N-bis(2- ethylhexyl)-6-methyl-(Mixture)		
	Marine water	0,000098 mg/l
	Intermittent use/release	0,00976 mg/l
	Soil	0,00184 - 0,842
		mg/kg
	Fresh water sediment	0,0121 - 4,23
		mg/kg
	Marine sediment	0,00121 - 0,423
		mg/kg
	Microbiological Activity in Sewage Treat- ment Systems	0,69 mg/l

### 8.2 Exposure controls

### **Engineering measures**

none

#### Personal protective equipment

Eye protection : Safety glasses with side-shields

Hand protection

Material : Nitrile rubber
Break through time : > 10 min
Protective index : Class 1

Remarks : Wear protective gloves. The break through time depends

amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each

case.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374

derived from it.

Skin and body protection : Choose body protection in relation to its type, to the concen-

tration and amount of dangerous substances, and to the spe-

cific work-place.

Respiratory protection : Not required; except in case of aerosol formation.

Filter type : Filter type P

Protective measures : The type of protective equipment must be selected according

to the concentration and amount of the dangerous substance

at the specific workplace.

### **SECTION 9: Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties



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Physical state : paste

Colour : grey

Odour : characteristic

Odour Threshold : No data available

Melting point/range : No data available

Boiling point/boiling range : No data available

Flammability (solid, gas) : Combustible Solids, Not classified as a flammability hazard

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

Flash point : Not applicable

Auto-ignition temperature : No data available

Decomposition temperature : No data available

pH : Not applicable

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : Not applicable

Solubility(ies)

Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available

Vapour pressure : < 0,001 hPa (20 °C)

Relative density : 1,01 (20 °C)

Reference substance: Water The value is calculated

Density : 1,01 g/cm3

(20 °C)

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Bulk density : No data available

Relative vapour density : No data available

9.2 Other information

Explosives : Not explosive

Oxidizing properties : No data available

Self-ignition : No data available

Evaporation rate : No data available

Sublimation point : No data available

### **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

No hazards to be specially mentioned.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : No conditions to be specially mentioned.

10.5 Incompatible materials

Materials to avoid : No materials to be especially mentioned.

### 10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

### **SECTION 11: Toxicological information**

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

# **Acute toxicity**

**Product:** 

Acute oral toxicity : Acute toxicity estimate: > 2.000 mg/kg

Method: Calculation method

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Acute inhalation toxicity : Acute toxicity estimate: > 5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: Calculation method

Acute dermal toxicity : Symptoms: Redness, Local irritation

**Components:** 

copper:

Acute oral toxicity : LD50 (Rat): 482 mg/kg

Method: OECD Test Guideline 401

GLP: yes

Acute inhalation toxicity : LC50 (Rat): > 5,11 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 436

GLP: yes

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg

Method: OECD Test Guideline 402

GLP: yes

Assessment: The substance or mixture has no acute dermal

toxicity

copper flakes (coated with aliphatic acid):

Acute oral toxicity : LD50 (Rat): > 300 - 500 mg/kg

Method: OECD Test Guideline 423

GLP: yes

Acute inhalation toxicity : Assessment: The component/mixture is toxic after short term

inhalation.

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg

Assessment: The substance or mixture has no acute dermal

toxicity

Amines, N-C16-C18-alkyl-(evennumbered, C18 unsaturated) propane-1,3-diaminium di[(9Z)-

octadec-9-enoate]:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

Acute dermal toxicity : LD50 (Rabbit): > 2.000 mg/kg

Assessment: The substance or mixture has no acute dermal

toxicity

 $N, N-bis (2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, \ N, N-bis (2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, \ 2H-Benzotriazole-2-methanamine, \ N, N-bis (2-ethylhexyl)-4-methyl-1H-benzotriazole-2-methanamine, \ N, N-bis (2-ethylhexyl)-4-methyl-1H-benzotriazole-2-methylamine, \ N, N-bis (2-ethylhexyl)-4-methyl-1H-benzotriazole-2-methylamine, \ N, N-bis (2-ethylhexyl)-4-methyl-1H-benzotriazole-2-methyl-2-m$ 



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methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

:

Acute oral toxicity : LD50 (Rat): 3.313 mg/kg

Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

**Graphite:** 

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

Method: OECD Test Guideline 423

Assessment: The substance or mixture has no acute oral tox-

icity

Acute inhalation toxicity : LC50 (Rat): > 2.000 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute inhala-

tion toxicity

aluminium powder (stabilised):

Acute inhalation toxicity : LC50 (Rat): > 5,09 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: The substance or mixture has no acute inhala-

tion toxicity

titanium dioxide; [in powder form containing <1 % of particles with aerodynamic diameter

≤ 10 µm]:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

Method: OECD Test Guideline 401

GLP: yes

Acute inhalation toxicity : (Rat): > 5,09 mg/l

Method: OECD Test Guideline 403

GLP: no

Skin corrosion/irritation

**Product:** 

Remarks : This information is not available.

Components:

copper:



according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



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Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

GLP : yes

copper flakes (coated with aliphatic acid):

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

GLP : yes

Amines, N-C16-C18-alkyl-(evennumbered, C18 unsaturated) propane-1,3-diaminium di[(9Z)-octadec-9-enoate]:

Species : Rabbit

Assessment : Irritating to skin. Result : Irritating to skin.

N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

:

Species : Rabbit

Assessment : Irritating to skin.

Method : Draize Test

Result : Irritating to skin.

**Graphite:** 

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

aluminium powder (stabilised):

Species : Rabbit

Assessment : No skin irritation Result : No skin irritation

titanium dioxide; [in powder form containing <1 % of particles with aerodynamic diameter  $\leq$  10 µm]:

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

GLP : no



according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



### **WOLFRACOAT C**

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#### Serious eye damage/eye irritation

**Product:** 

Remarks This information is not available.

Components:

copper:

**Species** Rabbit

Assessment No eve irritation

Method **OECD Test Guideline 405** 

Result No eye irritation

**GLP** yes

copper flakes (coated with aliphatic acid):

Assessment Irritating to eyes. Result Irritating to eyes.

Amines, N-C16-C18-alkyl-(evennumbered, C18 unsaturated) propane-1,3-diaminium di[(9Z)-

octadec-9-enoate]:

Rabbit **Species** 

Assessment Irritating to eyes.

Method **OECD Test Guideline 405** 

Result Irritating to eyes.

N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

**Species** Rabbit

Assessment No eye irritation Method **Draize Test** Result No eye irritation

**Graphite:** 

**Species** Rabbit

No eye irritation Assessment

**OECD Test Guideline 405** Method

Result No eye irritation

aluminium powder (stabilised):

**Species** Rabbit

Assessment No eye irritation No eye irritation Result



according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



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titanium dioxide; [in powder form containing <1 % of particles with aerodynamic diameter  $\leq$  10 µm]:

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

Result : No eye irritation

### Respiratory or skin sensitisation

**Product:** 

Remarks : This information is not available.

### **Components:**

copper:

Test Type : Maximisation Test

Species : Guinea pig

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

GLP : yes

#### copper flakes (coated with aliphatic acid):

Test Type : Maximisation Test Species : Guinea pig

Assessment : Did not cause sensitisation on laboratory animals. Result : Did not cause sensitisation on laboratory animals.

# Amines, N-C16-C18-alkyl-(evennumbered, C18 unsaturated) propane-1,3-diaminium di[(9Z)-octadec-9-enoate]:

octadec-9-enoatej:

Assessment : Does not cause skin sensitisation. Result : Does not cause skin sensitisation.

N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

:

Test Type : Maximisation Test

Species : Guinea pig

Assessment : The product is a skin sensitiser, sub-category 1B.

Method : OECD Test Guideline 406

Result : The product is a skin sensitiser, sub-category 1B.

**Graphite:** 

Species : Mouse

Method : OECD Test Guideline 429

according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



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Result : negative

aluminium powder (stabilised):

Species : Guinea pig

Assessment : Did not cause sensitisation on laboratory animals. Result : Did not cause sensitisation on laboratory animals.

titanium dioxide; [in powder form containing <1 % of particles with aerodynamic diameter ≤ 10 µm]:

Species : Mouse

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 429

Result : Does not cause skin sensitisation.

Germ cell mutagenicity

**Product:** 

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

**Components:** 

copper:

Germ cell mutagenicity- As-

sessment

Tests on bacterial or mammalian cell cultures did not show

mutagenic effects.

Amines, N-C16-C18-alkyl-(evennumbered, C18 unsaturated) propane-1,3-diaminium di[(9Z)-octadec-9-enoate]:

Genotoxicity in vitro : Test Type: Ames test

Result: negative

Germ cell mutagenicity- As-

sessment

Tests on bacterial or mammalian cell cultures did not show

mutagenic effects.

N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

:

Genotoxicity in vitro : Test Type: Ames test

Method: OECD Test Guideline 471

Result: negative

Germ cell mutagenicity- As-

sessment

Tests on bacterial or mammalian cell cultures did not show

mutagenic effects.



according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



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**Graphite:** 

Genotoxicity in vitro : Test Type: Microbial mutagenesis assay (Ames test)

Method: OECD Test Guideline 471

Result: negative

Test Type: gene mutation test Method: OECD Test Guideline 476

Result: negative

Test Type: Chromosome aberration test in vitro

Method: OECD Test Guideline 473

Result: negative

titanium dioxide; [in powder form containing <1 % of particles with aerodynamic diameter ≤ 10 μm]:

Germ cell mutagenicity- As-

sessment

Tests on bacterial or mammalian cell cultures did not show

mutagenic effects.

Carcinogenicity

Product:

Remarks : No data available

Carcinogenicity - Assess-

ment

Not classifiable as a human carcinogen.

Components:

copper:

Carcinogenicity - Assess-

ment

: Not classifiable as a human carcinogen.

Amines, N-C16-C18-alkyl-(evennumbered, C18 unsaturated) propane-1,3-diaminium di[(9Z)-octadec-9-enoate]:

Carcinogenicity - Assess-

ment

No evidence of carcinogenicity in animal studies.

N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

:

Carcinogenicity - Assess-

ment

Carcinogenicity classification not possible from current data.

titanium dioxide; [in powder form containing <1 % of particles with aerodynamic diameter ≤ 10 µm]:

Carcinogenicity - Assess- : No evidence of carcinogenicity in animal studies.

according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



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ment

Reproductive toxicity

Product:

Effects on fertility : Remarks: No data available

Effects on foetal develop-

ment

Remarks: No data available

**Components:** 

copper:

Reproductive toxicity - As-

sessment

: - Fertility -

No toxicity to reproduction

- Teratogenicity -

No toxicity to reproduction

Amines, N-C16-C18-alkyl-(evennumbered, C18 unsaturated) propane-1,3-diaminium di[(9Z)-octadec-9-enoate]:

Reproductive toxicity - As-

sessment

- Fertility -

No toxicity to reproduction

- Teratogenicity -

No toxicity to reproduction

N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

.

Effects on fertility : Species: Rat

Application Route: Oral

General Toxicity - Parent: NOAEL: 45 mg/kg body weight General Toxicity F1: NOAEL: 45 mg/kg body weight

Fertility: NOAEL: 150 mg/kg body weight Method: OECD Test Guideline 422

Effects on foetal develop-

ment

Species: Rat

**Application Route: Oral** 

Duration of Single Treatment: 28 h

General Toxicity Maternal: NOAEL: 45 mg/kg body weight Developmental Toxicity: NOAEL: 45 mg/kg body weight

Method: OECD Test Guideline 422

Reproductive toxicity - As-

sessment

: - Fertility -

No evidence of adverse effects on sexual function and fertility,

or on development, based on animal experiments.

according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



**WOLFRACOAT C** 

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- Teratogenicity -

No evidence of adverse effects on sexual function and fertility,

or on development, based on animal experiments.

**Graphite:** 

Effects on fertility : Species: Rat

Application Route: Oral

General Toxicity F1: NOAEL: 813 mg/kg body weight

Method: OECD Test Guideline 422

titanium dioxide; [in powder form containing <1 % of particles with aerodynamic diameter ≤ 10 µm]:

Reproductive toxicity - As-

sessment

- Fertility -

No toxicity to reproduction

- Teratogenicity -

No effects on or via lactation

STOT - single exposure

**Components:** 

copper:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, single exposure.

Amines, N-C16-C18-alkyl-(evennumbered, C18 unsaturated) propane-1,3-diaminium di[(9Z)-octadec-9-enoate]:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, single exposure.

N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, single exposure.

titanium dioxide; [in powder form containing <1 % of particles with aerodynamic diameter ≤ 10 µm]:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, single exposure.



according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



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### STOT - repeated exposure

#### **Components:**

copper:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

Amines, N-C16-C18-alkyl-(evennumbered, C18 unsaturated) propane-1,3-diaminium di[(9Z)-octadec-9-enoate]:

Exposure routes : Ingestion

Assessment : May cause damage to organs through prolonged or repeated

exposure.

N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

titanium dioxide; [in powder form containing <1 % of particles with aerodynamic diameter ≤ 10 µm]:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

### Repeated dose toxicity

**Product:** 

Remarks : This information is not available.

### **Components:**

N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

.

Species : Rat

NOAEL : 45 mg/kg

Application Route : Oral

Exposure time : 28

Method : OECD Test Guideline 422

**Graphite:** 

Species : Rat

according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



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NOAEL : 813 mg/kg Application Route : Oral

Method : OECD Test Guideline 422

Species : Rat NOAEL : > 2 mg/l

Application Route : inhalation (dust/mist/fume)
Method : OECD Test Guideline 412

### **Aspiration toxicity**

#### **Product:**

This information is not available.

#### **Components:**

#### copper:

No aspiration toxicity classification

N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

:

No aspiration toxicity classification

titanium dioxide; [in powder form containing <1 % of particles with aerodynamic diameter  $\leq$  10 µm]:

No aspiration toxicity classification

### 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.

#### **Further information**

**Product:** 

Remarks : Information given is based on data on the components and

the toxicology of similar products.

according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



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**SECTION 12: Ecological information** 

12.1 Toxicity

**Product:** 

Toxicity to fish : Remarks: May cause long-term adverse effects in the aquatic

environment.

Toxicity to daphnia and other :

aquatic invertebrates

Remarks: No data available

Toxicity to algae/aquatic

plants

Remarks: No data available

Toxicity to microorganisms

Remarks: No data available

**Components:** 

copper:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0,094 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0,0338 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

NOEC (Pseudokirchneriella subcapitata (green algae)): 37,6

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

M-Factor (Acute aquatic tox-

icity)

10

Toxicity to fish (Chronic tox-

icity)

NOEC: 0,021 mg/l Exposure time: 27 d

M-Factor (Chronic aquatic

toxicity)

1

**Ecotoxicology Assessment** 

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

copper flakes (coated with aliphatic acid):

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 0,0384 mg/l

Exposure time: 96 h

Test Type: flow-through test



according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



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M-Factor (Acute aquatic tox-

icity)

M-Factor (Chronic aquatic

toxicity)

10

10

**Ecotoxicology Assessment** 

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

Amines, N-C16-C18-alkyl-(evennumbered, C18 unsaturated) propane-1,3-diaminium di[(9Z)-

octadec-9-enoate]:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 0,1 - 1 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 0,1 - 1 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

: EC50 (Pseudokirchneriella subcapitata (green algae)): > 0,01

- 0,1 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

M-Factor (Acute aquatic tox-

icity)

10

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

EC50: 1,41 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

Test Type: semi-static test

Method: OECD Test Guideline 211

M-Factor (Chronic aquatic

toxicity)

1

### **Ecotoxicology Assessment**

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

:

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): 1,3 mg/l

Exposure time: 96 h

according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



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Test Type: static test

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 2,05 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Desmodesmus subspicatus (green algae)): 0,762 mg/l

Exposure time: 72 h
Test Type: static test

Method: OECD Test Guideline 201

M-Factor (Acute aquatic tox-

icity)

1

Toxicity to microorganisms : EC20 (activated sludge): 15 mg/l

Exposure time: 3 h

Test Type: Respiration inhibition Method: OECD Test Guideline 209

**Ecotoxicology Assessment** 

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

**Graphite:** 

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 100 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

(Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): > 100

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

aluminium powder (stabilised):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0,12 mg/l

Exposure time: 96 h Test Type: static test

Remarks: No toxicity at the limit of solubility

**Ecotoxicology Assessment** 

Acute aquatic toxicity : This product has no known ecotoxicological effects.

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



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titanium dioxide; [in powder form containing <1 % of particles with aerodynamic diameter  $\leq$  10 µm]:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l

Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

LC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

# 12.2 Persistence and degradability

**Product:** 

Biodegradability : Remarks: No data available

Physico-chemical removabil- :

ity

Remarks: No data available

### **Components:**

copper:

Biodegradability : Remarks: The methods for determining biodegradability are

not applicable to inorganic substances.

Amines, N-C16-C18-alkyl-(evennumbered, C18 unsaturated) propane-1,3-diaminium di[(9Z)-octadec-9-enoate]:

Biodegradability : Test Type: aerobic

Inoculum: activated sludge Result: rapidly biodegradable Biodegradation: 65 %

Exposure time: 28 d

Method: OECD Test Guideline 301D

GLP: yes

N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

:

Biodegradability : Test Type: Primary biodegradation

Inoculum: activated sludge Result: Not rapidly biodegradable

Biodegradation: < 10 %

Exposure time: 28 d

Method: OECD Test Guideline 301B



according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



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**Graphite:** 

Biodegradability : Remarks: The methods for determining biodegradability are

not applicable to inorganic substances.

12.3 Bioaccumulative potential

**Product:** 

Bioaccumulation : Remarks: This mixture contains no substance considered to

be persistent, bioaccumulating and toxic (PBT).

This mixture contains no substance considered to be very

persistent and very bioaccumulating (vPvB).

**Components:** 

Amines, N-C16-C18-alkyl-(evennumbered, C18 unsaturated) propane-1,3-diaminium di[(9Z)-octadec-9-enoate]:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

:

Bioaccumulation : Bioconcentration factor (BCF): 1.676

Partition coefficient: n-

octanol/water

Remarks: Not applicable

12.4 Mobility in soil

**Product:** 

Mobility : Remarks: No data available

Distribution among environ-

mental compartments

Remarks: 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.

**Components:** 

copper:

Assessment : Remarks: Not applicable

a brand of
FREUDENBERG

according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



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titanium dioxide; [in powder form containing <1 % of particles with aerodynamic diameter ≤ 10 µm]:

Assessment : Non-classified vPvB substance. Non-classified PBT substance

### 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

#### **Product:**

Additional ecological infor-

mation

Very toxic to aquatic organisms, may cause long-term adverse

effects in the aquatic environment.

### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water

courses or the soil.

Do not dispose of with domestic refuse.

Dispose of as hazardous waste in compliance with local and

national regulations.

Waste codes should be assigned by the user based on the

application for which the product was used.

Contaminated packaging : Packaging that is not properly emptied must be disposed of as

the unused product.

Dispose of waste product or used containers according to

local regulations.

The following Waste Codes are only suggestions:

Waste Code : used product, unused product

12 01 12\*, spent waxes and fats

uncleaned packagings

15 01 10, packaging containing residues of or contaminated

by hazardous substances

according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



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### **SECTION 14: Transport information**

### 14.1 UN number or ID number

ADN : UN 3077
ADR : UN 3077
RID : UN 3077
IMDG : UN 3077
IATA : UN 3077

### 14.2 UN proper shipping name

**ADN** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Tallow aminoleate, Copper metal powder)

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Tallow aminoleate, Copper metal powder)

RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Tallow aminoleate, Copper metal powder)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Tallow aminoleate, Copper metal powder)

**IATA** : Environmentally hazardous substance, solid, n.o.s.

(Tallow aminoleate, Copper metal powder)

### 14.3 Transport hazard class(es)

ADN : 9
ADR : 9
RID : 9
IMDG : 9
IATA : 9

### 14.4 Packing group

#### **ADN**

Packing group : III
Classification Code : M7
Hazard Identification Number : 90
Labels : 9

**ADR** 

Packing group : III
Classification Code : M7
Hazard Identification Number : 90
Labels : 9
Tunnel restriction code : (-)

according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



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**RID** 

Packing group : III
Classification Code : M7
Hazard Identification Number : 90
Labels : 9

**IMDG** 

Packing group : III
Labels : 9
EmS Code : F-A, S-F

IATA (Cargo)

Packing instruction (cargo : 956

aircraft)

Packing instruction (LQ) : Y956 Packing group : III

Labels : Miscellaneous Dangerous Goods

IATA (Passenger)

Packing instruction (passen: 956

ger aircraft)

Packing instruction (LQ) : Y956
Packing group : III

Labels : Miscellaneous Dangerous Goods

14.5 Environmental hazards

ADN

Environmentally hazardous : yes

ADR

Environmentally hazardous : yes

RID

Environmentally hazardous : yes

**IMDG** 

Marine pollutant : yes

IATA (Passenger)

Environmentally hazardous : yes

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.

according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



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**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)

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

(EU SVHC)

REACH - List of substances subject to authorisation

(Annex XIV)

(EU. REACH-Annex XIV)

Regulation (EC) No 1005/2009 on substances that de-

plete the ozone layer (EC 1005/2009)

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

tants (recast) (EU POP)

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

of dangerous chemicals

(EU PIC)

Regulation (EU) 2019/1148 on the marketing and use of : Listed

explosives precursors

This product is regulated by Regulation (EU) 2019/1148: all suspicious transactions, and significant disappearances and thefts should be reported to the relevant na-

tional contact point. Please see

https://ec.europa.eu/home-affairs/sites/ homeaf-

fairs/files/what-we-do/policies/crisis-and-

terrorism/explosives/explosives-

precur-

sors/docs/list\_of\_competent\_authorities\_and\_national\_c

ontact\_points\_en.pdf

Seveso III: Directive 2012/18/EU of the European : E1

Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Water hazard class (Germa-

TA Luft List (Germany) Total dust:

Not applicable

Article 57).

Not applicable

Not applicable

Not applicable

Not applicable

(ANNEX II)

aluminium powder (stabilised)

**ENVIRONMENTAL HAZARDS** 

This product does not contain sub-

stances of very high concern (Regu-

lation (EC) No 1907/2006 (REACH),

WGK 3 highly hazardous to water

Classification according to AwSV, Annex 1 (5.2)

a brand of **N FREUDENBERG** 

according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



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others: 21,46 %

Inorganic substances in powdered form:

portion Class 3: 8 %

Inorganic substances in vapour or gaseous form:

Not applicable Organic Substances:

others: 70,53 %

Carcinogenic substances:

portion Class 1: < 0,01 %

Not applicable
Mutagenic:
Not applicable
Toxic to reproduction:
Not applicable

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial

emissions (integrated pollution prevention and control)

Not applicable

### 15.2 Chemical safety assessment

This information is not available.

#### **SECTION 16: Other information**

### **Full text of H-Statements**

H228 : Flammable solid.
H302 : Harmful if swallowed.
H315 : Causes skin irritation.

H317 : May cause an allergic skin reaction.
H319 : Causes serious eye irritation.

H331 : Toxic if inhaled.

H373 : May cause damage to organs through prolonged or repeated

exposure if swallowed.

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

Note T : This substance may be marketed in a form which does not

have the physical hazards as indicated by the classification in



according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



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the entry in Part 3. If the results of the relevant method or methods in accordance with Part 2 of Annex I of this Regulation show that the specific form of substance marketed does not exhibit this physical property or these physical hazards, the substance shall be classified in accordance with the result or results of this test or these tests. Relevant information, including reference to the relevant test method(s) shall be included in the safety data sheet.

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

TRGS 903 : TRGS 903 - Biological 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 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**

Classification of the mixture: Classification procedure:

Aquatic Acute 1 H400 Calculation method
Aquatic Chronic 1 H410 Calculation method



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