

according to UK REACH Regulation

#### **ACMOS 100-5030**

Revision date: 24.06.2021 Page 1 of 20

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

#### 1.1. Product identifier

ACMOS 100-5030

UFI: JMC5-8NC7-RDSQ-2798

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

## Relevant identified uses

Release agent for applicator rollers

# Uses advised against

Consumer uses: Private households (= general public = consumers)

Sector of uses [SU]: 21

Do not use for private purposes (household).

Relevant identified uses - Further information:

Industrial uses: Uses of substances as such or in preparations at industrial sites

Sector of uses [SU]: 3

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Sector of uses [SU]: 22

The product is intended for professional use.

# 1.3. Details of the supplier of the safety data sheet

## Manufacturer

Company name: ACMOS CHEMIE KG
Street: Industriestrasse 49
Place: D-28199 Bremen

Post-office box: 10 10 69

D-28010 Bremen

Telephone: +49 (0)421-5189-0 Telefax: +49 (0)421-511415

e-mail: acmos@acmos.com
Contact person: Mr. Stephan Dryhaus
e-mail: sds@acmos.com
Internet: www.acmos.com

Responsible Department: Laboratory (Division: Occupational- / Product security) - see under section 16

1.4. Emergency telephone number: +49 (0)551 19240 (Emergency information service / official advisory body:

Giftinformationszentrum Nord, Universität Göttingen, 24 h from mo. - su.)

Language(s) of Telephone Service: DE, EN

Supplier

Company name: Realwood Machinery & Consumables Limited

Street: Unit 29, Edison Road, St. Ives Place: GB-PE27 3LF Cambridgeshire

Telephone: +44 1480496660 Telefax: +44 1480461366

e-mail: sales@realwoodmachinery.co.uk

Contact person: Mr. David Levett

Internet: www.realwoodmachinery.co.uk

1.4. Emergency telephone number: +44 111 (Emergency information service / official advisory body: National Poisons

Information Service - NPIS Birmingham) (https://www.npis.org)

Language(s) of Telephone Service: EN

# **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

# **GB CLP Regulation**

Hazard categories:

Serious eye damage/eye irritation: Eye Irrit. 2

Hazard Statements:

Causes serious eye irritation.

# 2.2. Label elements

# **GB CLP Regulation**

Signal word: Warning Pictograms:





according to UK REACH Regulation

#### **ACMOS 100-5030**

Revision date: 24.06.2021 Page 2 of 20

**Hazard statements** 

H319 Causes serious eye irritation.

**Precautionary statements** 

P280 Wear protective gloves/eye protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

Special labelling of certain mixtures

EUH208 Contains reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one

(3:1). May produce an allergic reaction.

Labeling according to Regulation (EU) No 528/2012 on biocides, Article 58 (3) and Regulation (EC) No 1272/2008, Article 25 (due to the specific conditions of the active substance approval): a) Contains biocidal products: Product-type 6: Preservatives for products during storage. b) Property attributed to the treated article: None c) Name of all active ingredients: See product label. d) Names of contained nanomaterials: None e) Relevant use instructions: Use personal protective equipment

as required.

### Additional advice on labelling

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

## 2.3. Other hazards

Adverse physicochemical effects:

See section 9 for physical and chemical properties.

Adverse human health effects and symptoms:

See section 11 for toxicological information.

May cause sensitisation especially in sensitive humans.

Adverse environmental effects:

See section 12 for environmental information.

Other adverse effects:

Special danger of slipping by leaking/spilling product.

Results of PBT-/vPvB-assesment:

See under section 12.5 - Results of PBT and vPvB assessment.

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

### 3.2. Mixtures

#### Chemical characterization

Solution of active ingredients in water

## **Hazardous components**

CAS No	Chemical name				
	EC No	Index No	REACH No		
	GHS Classification		•		
97043-91-9	alcohols, C9-16, ethoxylated			0,5 - < 1 %	
	Acute Tox. 4, Eye Dam. 1; H302 H318		•		
68439-50-9	alcohols, C12-14, ethoxylated			0,5 - < 1 %	
	Acute Tox. 4, Eye Dam. 1, Aquatic Ch	ronic 3; H302 H318 H412	•		
78330-20-8	alcohols, C9-11-iso-, C10-rich, ethoxylated				
	Acute Tox. 4, Eye Dam. 1; H302 H318				
55965-84-9	reaction mass of 5-chloro-2-methyl-2H	-isothiazol-3-one and 2-methyl-2H-isothia	azol-3-one (3:1)	< 0,0015 %	
	911-418-6	613-167-00-5	01-2120764691-48		
	Acute Tox. 2, Acute Tox. 2, Acute Tox. 3, Skin Corr. 1C, Eye Dam. 1, Skin Sens. 1A, Aquatic Acute 1, Aquatic Chronic 1; H330 H310 H301 H314 H318 H317 H400 H410 EUH071				

Full text of H and EUH statements: see section 16.



according to UK REACH Regulation

## **ACMOS 100-5030**

Revision date: 24.06.2021 Page 3 of 20

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc.	. Limits, M-factors and ATE	
97043-91-9		alcohols, C9-16, ethoxylated	0,5 - < 1 %
	oral: LD50 = 5	588,2 mg/kg	
68439-50-9		alcohols, C12-14, ethoxylated	0,5 - < 1 %
	oral: LD50 = >	> 300 - < 2000 mg/kg	
78330-20-8		alcohols, C9-11-iso-, C10-rich, ethoxylated	< 1 %
	oral: LD50 = >	> 300 - < 2000 mg/kg	
55965-84-9	911-418-6	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	< 0,0015 %
	mg/kg; oral: L		

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

# 4.1. Description of first aid measures

### General information

Remove affected person from the danger area and lay down.

Take off immediately all contaminated clothing and wash it before reuse.

Put victim at rest, cover with a blanket and keep warm.

Do not leave affected person unattended.

If a person vomits when lying on his back, place him in the recovery position.

If breathing is irregular or stopped, administer artificial respiration.

If unconscious but breathing normally, place in recovery position and seek medical advice.

Never give anything by mouth to an unconscious person or a person with cramps.

In the event of cardiac arrest immediately perform cardiopulmonary resuscitation.

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Self-protection of the first aider:

Wear personal protection equipment (refer to section 8).

First Aid.

Notes for the doctor:

No special measures are necessary.

### After inhalation

Remove victim out of the danger area.

Provide fresh air.

Consult a doctor immediately in the case of inhaling spray mist and show him packing or label.

## After contact with skin

Wash immediately with:

Water and soap

Rub greasy ointment into the skin.

Do not wash with:

Solvents/Thinner

In case of skin irritation, consult a physician.

# After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Remove contact lenses, if present and easy to do. Continue rinsing.

Protect uninjured eye.

# After ingestion

Do NOT induce vomiting.

Give nothing to eat or drink.

Never give anything by mouth to an unconscious person or a person with cramps.

Call a physician immediately.

# 4.2. Most important symptoms and effects, both acute and delayed

The following symptoms may occur:

Cough





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## **ACMOS 100-5030**

Revision date: 24.06.2021 Page 4 of 20

Allergic reactions

Acidosis

Nausea

## 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

## Suitable extinguishing media

Full water jet

Water spray jet

Water mist

Extinguishing powder (ABC-powder)

Foam

Carbon dioxide (CO2)

Fire class: not relevant
Unsuitable extinguishing media

None known

#### 5.2. Special hazards arising from the substance or mixture

Hazardous combustion products:

None known

The product itself does not burn.

#### 5.3. Advice for firefighters

Usual measures of preventive and averting fire protection.

Co-ordinate fire-fighting measures to the fire surroundings.

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for firefighters

not relevant

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

# 6.1. Personal precautions, protective equipment and emergency procedures

# General measures

Avoid contact with skin, eyes and clothes.

Do not breathe vapour/aerosol.

Prevent further leakage or spillage if safe to do so.

Provide adequate ventilation.

Special danger of slipping by leaking/spilling product.

For non-emergency personnel:

Use personal protection equipment.

Walk out of the danger zone and notify trained personnel.

Emergency procedures:

Keep the factory emergency plan and the information chain.

For emergency responders:

Use personal protection equipment.

The personal protective equipment must be adapted to the situation.

Suitable material:

See under section 8.2 - Personal protection equipment.

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

Do not allow to enter into soil/subsoil.

Ensure waste is collected and contained.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

# 6.3. Methods and material for containment and cleaning up

## Other information

For containment:

Repair leaks if without risk.

Move containers from spill area.





according to UK REACH Regulation

## **ACMOS 100-5030**

Revision date: 24.06.2021 Page 5 of 20

Make sure spills can be contained, e.g. in sump pallets or kerbed areas.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Cover drains.

For cleaning up:

Clean-up methods - large spillage:

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

Shovel into suitable container for disposal.

Local authorities should be advised if significant spillages cannot be contained.

Clean-up methods - small spillage:

Clear spills immediately.

Wipe up with absorbent material (eq. cloth, fleece).

Collect in closed and suitable containers for disposal.

Clear contaminated areas thoroughly.

Recommended cleansing agent:

Clean with detergents. Avoid solvent cleaners.

Retain contaminated washing water and dispose it.

Ensure all waste water is collected and treated via a waste water treatment plant.

Ventilate affected area.

Suitable material for taking up:

Sand

Kieselguhr

Universal binder

Absorbing material, organic

Unsuitable material for taking up:

None known

#### 6.4. Reference to other sections

Personal protection equipment: see section 8

Disposal: see section 13

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

# 7.1. Precautions for safe handling

# Advice on safe handling

Measures to prevent aerosol and dust generation:

All work processes must always be designed so that the following is as low as possible:

Inhalation of vapours or spray/mists

Eye contact

Skin contact

Technical ventilation of workplace

Use only in a exhaust booth with integrated air filter.

Use in ventilated spray booths only.

Recirculation of exhaust air is not recommended.

Always close containers tightly after the removal of product.

## Advice on protection against fire and explosion

Measures to prevent fire:

The product is not: Combustible

Usual measures for fire prevention.

Fire-fighting equipment on the basis of class B.

# Further information on handling

Environmental precautions:

Transfer wash-downs in sealed containers.

Provide for retaining containers, e.g. floor pan without outflow.

Advices on general occupational hygiene:

Wear personal protection equipment (refer to section 8).

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

General industrial hygiene practice.

Handle in accordance with good industrial hygiene and safety practice.

Working places should be designed to allow cleaning at any time.

Floors, walls and other surfaces in the hazard area must be cleaned regularly.

Clean spray booth and exhaust hood completely with every product change.





according to UK REACH Regulation

# **ACMOS 100-5030**

Revision date: 24.06.2021 Page 6 of 20

When using do not eat, drink, smoke, sniff.

Thorough skin-cleansing after handling the product.

Used working clothes should not be worn outside the work area.

# 7.2. Conditions for safe storage, including any incompatibilities

# Requirements for storage rooms and vessels

Suitable floor material:

Floors should be impervious, resistant to liquids and easy to clean.

Protect against:

Heat

Cold

Recommended storage temperature: +10 ... +30 °C

Keep away from:

Food and feedingstuffs

Packaging materials:

Suitable container/equipment material:

Keep/Store only in original container.

Unsuitable container/equipment material:

See under section 8.2 - Hand protection.

# Hints on joint storage

Do not store together with:

Storage class:

1 (Explosive hazardous substances)

6.2 (Infectious substances)

7 (Radioactive substances)

# Further information on storage conditions

Technical measures and storage conditions:

The valid water and zoning ordinances must be observed.

Keep container tightly closed.

Protect containers against damage.

Ensure adequate ventilation of the storage area.

Do not store outside.

See also instuctions on the label.

## 7.3. Specific end use(s)

Recommendation:

Possibilities for substitution and references to less hazardous products:

This product was designed for a special application purpose and optimized appropriately.

In case of questions regarding product and application, please contact our field service in line with customer service or our technical sales department.

Observe technical data sheet.

Industrial sector specific solutions:

Hazardous substance information systems of professional associations:

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

# 8.1. Control parameters



according to UK REACH Regulation

## **ACMOS 100-5030**

Revision date: 24.06.2021 Page 7 of 20

#### **DNEL/DMEL values**

CAS No	Substance					
DNEL type		Exposure route	Effect	Value		
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-met	thyl-2H-isothiazol-3-one (3	:1)			
Worker DNEL, long-term		inhalation	local	0,02 mg/m³		
Worker DNEL, acute		inhalation	local	0,04 mg/m³		
Consumer DNEL, long-term		inhalation	local	0,02 mg/m³		
Consumer DNEL, acute		inhalation	local	0,04 mg/m³		
Consumer DNEL, long-term		oral	systemic	0,09 mg/kg bw/day		
Consumer DNEL, acute		oral	systemic	0,11 mg/kg bw/day		

#### PNEC values

CAS No	Substance			
Environmental c	Environmental compartment			
55965-84-9 reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)				
Freshwater		0,00339 mg/l		
Marine water 0,00339 n				
Freshwater sedi	ment	0,027 mg/kg		
Marine sediment 0,027 m		0,027 mg/kg		
Soil 0,01 mg/kg				

## Additional advice on limit values

Recommended monitoring procedures:

not relevant

Exposure limits at intended use:

not relevant

DNEL-/PNEC-values:

There are no exposure scenarios attached in the Appendix of this Safety Data Sheet.

Risk management measures according to used control banding approach:

Control banding for chemicals according to the ILO CHEMICAL CONTROL TOOLKIT (ICCT): ICCT-Guidelines and Control Guidance Sheets (http://www.ilo.org/legacy/english/protection/safework/ctrl\_banding/toolkit/main\_guide.pdf)

Used model:

Consider appropriate model solutions according to good engineering practices on designing the working process, if available.

# 8.2. Exposure controls







# Appropriate engineering controls

Substance/mixture related measures to prevent exposure during identified uses:

Technical measures to prevent exposure:

Design of appropriate work processes and engineering controls and the use of adequate materials (physical cut-off of man and machine, model solutions as certified working methods, working appliance according to the state of the art, optimization of process / spray robots, working appliance for prevention of skin contact, models of working times).

Organisational measures to prevent exposure:

Execution of collective protection measures at source and appropriate organisational measures (local exhaust ventilation, ventilation by technical means, general ventilation, measures on averting a danger at breakdowns / at emergencies / after accidents, first-aid-measures, manner related measures: operating instruction / instruction of employees, occupational medicine health precaution).



according to UK REACH Regulation

#### **ACMOS 100-5030**

Revision date: 24.06.2021 Page 8 of 20

Structural measures to prevent exposure:

Execution of individual and personnel protection measures (personal protective equipment - PPE).

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Technical measures and the application of suitable work processes have priority over personal protection equipment.

References for design of technical equipment:

See under section 7.1 - Precautions for safe handling.

Summary of the risk management measures for exposure scenario:

Use only the following product amount per time unit:

No information available.

Minimum room-width and room-height for handling/application:

No information available.

Minimum room ventilation rate for handling/application (air changes per hour):

No information available.

## Individual protection measures, such as personal protective equipment

#### Eye/face protection

If required according to hazard assessment:

Suitable eye protection:

Eye glasses with side protection (EN 166)

Recommended eye protection articles:

UVEX I-VO / UVEX I-3 / UVEX SUPER OTG

Or comparable articles from other companies.

#### Hand protection

Skin protection:

Preventive skin protection.:

Draw up skin protection programme.

Before starting work, apply water-resistant skincare preparations.

e.g. saniwip®, dualin® (PETER GREVEN PHYSIODERM)

Wash hands before breaks and after work.

e.g. ecosan®, topscrub® soft / topscrub® extra / topscrub® nature (PETER GREVEN PHYSIODERM)

After cleaning apply high-fat content skin care cream.

e.g. physioderm® creme, cura soft® / cUrea soft® (PETER GREVEN PHYSIODERM)

Apply skin care products after work.

If required according to hazard assessment:

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Decrease wearing protection gloves to an inevitable degree to avoid skin rash.

Technical and organizational protective actions have to be preferred.

Breakthrough times and swelling properties of the material must be taken into consideration.

Check leak tightness/impermeability prior to use.

Wear cotton undermitten if possible.

Change preventive gloves once by hour or use special skin-protective preparations for protective gloves carrier,

e.g. physioderm® proGlove (PETER GREVEN PHYSIODERM)

Take recovery periods for skin regeneration.

Do not wear gloves near rotary machines and tools.

Dispose preventive gloves after defect or expiry of wearing time. Replace when worn.

In the case of wanting to use the gloves again, clean them before taking off and air them well.

Wearing time with permanent contact:

Suitable gloves type

Gloves with long cuffs

Recommended glove articles:

Suitable materials at long term, direct contact (Recommended: Preventive index 6, accordingly > 480 min. permeation time in accordance to EN 374):

Nitrile rubber / NBR (KCL-CAMATRIL VELOURS® - Art. No. 730) - Layer thickness:  $0,4\,\,\mathrm{mm}$  Or comparable articles from other companies.

Unsuitable material:





according to UK REACH Regulation

#### **ACMOS 100-5030**

Revision date: 24.06.2021 Page 9 of 20

NR (natural rubber, natural latex)

Wearing time with occasional contact (splashes):

Suitable gloves type

Disposable gloves

Recommended glove articles:

Suitable materials at short term contact or splash (Recommended: Preventive index 3, accordingly > 60 min. permeation time in accordance to EN 374):

Disposable gloves of special nitrile rubber / NBR (KCL-DERMATRIL® P - Art. No. 743) - Layer thickness: 0,2 mm Or comparable articles from other companies.

The statements are based on self-tests, literary reference and information of glove manufacturers or have been derived from similar substances by analogy.

Source: CHEMIKALIEN-MANAGER - KCL software for hand protection.

It has to be noticed, that daily time of use of chemical protective gloves may be quite shorter in practice because of many factors of influence (e.g. thermal and mechanical stress as well as special conditions on the floor) than the permeation time determined in accordance to EN 374.

The respective permeation time doubles/halvens at about 1,5 times larger/lower layer thickness.

Declared permeation times according to EN 374 are not carried out under practical conditions. Therefore a maximum wearing time up to 50 % of breakthrough time is recommended.

They relate to the pure solvent as mean component.

Barrier creams are not substitutes for body protection.

#### Skin protection

If required according to hazard assessment:

Suitable protective clothing:

Overall, Natural fibres (e.g. cotton) (EN 340)

Chemical resistant safety shoes with conductible sole (EN ISO 20345)

Wash contaminated clothing prior to re-use.

Used working clothes should not be worn outside the work area.

Street clothing should be stored separately from work clothing.

Thermal hazards:

No thermal hazards during use of this product.

# Respiratory protection

If required according to hazard assessment:

Respiratory protection necessary at:

aerosol or mist formation +

high concentrations / prolonged exposure / insufficient ventilation / insufficient exhaust

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

Suitable respiratory protection apparatus:

Half-face mask or quarter facepiece: maximum use concentration for substances with exposure limits: P1 filter: up to a max. of 4 times the exposure limit. P2 filter: up to a max. of 10 times the exposure limit. P3 filter: up to a max. of 30 times the expo.

Recommended respiratory protection articles:

Particle filtrating half-face mask FFP2 (EN 149)

# **Environmental exposure controls**

Environmental exposure controls:

Technical measures to prevent exposure:

Discharge exhaust air only with suitable seperators to atmosphere.

Organisational measures to prevent exposure:

Should not be released into the environment.

Structural measures to prevent exposure:

Use the following recovery and/or abatement technique for cleaning waste gases:

Exhaust air scrubber



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## **ACMOS 100-5030**

Revision date: 24.06.2021 Page 10 of 20

Adsorption

Further information see under section 6.2 - Environmental precautions.

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

## 9.1. Information on basic physical and chemical properties

Physical state: Colour: light yellow Odour: characteristic

Test method

Changes in the physical state

Melting point/freezing point: < 0 °C literature value Boiling point or initial boiling point and boiling > 100 °C literature value

range:

Sublimation point: not applicable Softening point: not applicable Pour point: not applicable Flash point: not applicable

Flammability

Solid/liquid: not applicable (Liquid) Gas: not applicable (Liquid)

**Explosive properties** 

No flash point up to 100 °C.

Lower explosion limits: not relevant Upper explosion limits: not relevant Auto-ignition temperature: not relevant

Self-ignition temperature

Solid: Not pyrophoric. Gas: Not pyrophoric. Decomposition temperature: not relevant

**Oxidizing properties** 

not relevant

pH-Value: 8,6 (500 g/l) DIN 19268

Viscosity / dynamic: not determined

Viscosity / kinematic: <= 20,5 mm<sup>2</sup>/s DIN 53015

(at 40 °C)

Flow time: 32 s 3 DIN EN ISO 2431

(at 23 °C)

Water solubility: easily soluble

(at 20 °C)

Solubility in other solvents

miscible with most organic solvents (Alcohols, aldehydes, Ketone)

Partition coefficient n-octanol/water: not applicable (Mixtures)

Vapour pressure: Corresponds to the vapour pressure of water. < literature value

(at 20 °C) 23 hPa

Vapour pressure: Corresponds to the vapour pressure of water. < literature value (at 50 °C)

123 hPa Density (at 20 °C):

1 g/cm<sup>3</sup> DIN 51757

not applicable (Liquid) Bulk density: not determined Relative vapour density:

9.2. Other information

Other safety characteristics

not applicable Solvent separation test: Solvent content: not determined Solid content: not determined not determined Evaporation rate:

**Further Information** 





according to UK REACH Regulation

#### **ACMOS 100-5030**

Revision date: 24.06.2021 Page 11 of 20

Odour threshold: No data available

Surface tension: No data available Fat solubility: No data available

Calculated oxidation potential of the mixture (OP): not relevant

Substance group relevant properties:

Data relevant with regard to physical hazard classes (supplemental):

Explosives not applicable Flammable gases

Non-flammable. / not applicable (Liquid)

Aerosols

Non-flammable. / not applicable (Liquid)

Oxidising gas

Not oxidising. / not applicable (Liquid)

Gases under pressure not applicable (Liquid)

Flammable liquids
Non-flammable.

flammable solids

Non-flammable. / not applicable (Liquid)

Self-reactive substances and mixtures

not applicable Pyrophoric liquids

Not pyrophoric.

Pyrophoric solids

Not pyrophoric. / not applicable (Liquid)

self-heating substances and mixtures

not applicable

Substances or mixtures which, in contact with water, emit flammable gases

not applicable

Oxidising liquids

Not oxidising.

Oxidising solids

Not oxidising. / not applicable (Liquid)

Organic peroxides not applicable

Corrosive to metals.

Not corrosive to metals.

# **SECTION 10: Stability and reactivity**

# 10.1. Reactivity

The product is chemically stable under recommended conditions of storage, use and temperature.

# 10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

# 10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

# 10.4. Conditions to avoid

Further information see under section 7.2 - Conditions for safe storage, including any incompatibilities.

Further information see under section 10.5 - Incompatible materials.

# 10.5. Incompatible materials

Violent reaction with:

Hazardous substances that release flammable gases when in contact with water

Further information see under section 7.1 - Precautions for safe handling.

# 10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

No known hazardous decomposition products.

Under fire conditions: See under section 5.2 - Special hazards arising from the substance or mixture.

# **SECTION 11: Toxicological information**

# 11.1. Information on hazard classes as defined in GB CLP Regulation



according to UK REACH Regulation

## **ACMOS 100-5030**

Revision date: 24.06.2021 Page 12 of 20

# Toxicocinetics, metabolism and distribution

There are no data available on the preparation/mixture itself.

The product has not been tested.

Information on likely routes of exposure /

Symptoms related to the physical, chemical and toxicological characteristics:

See under section 4.2 - Most important symptoms and effects, both acute and delayed.

Exposure route:

In case of ingestion:

Ingestion causes nausea, weakness and central nervous system effects.

In case of skin contact:

May cause skin irritation in susceptible persons.

Prolonged or repeated skin contact may cause removal of natural fat from the skin resulting in dermatitis (skin inflammation).

In case of inhalation:

slightly irritant but not relevant for classification.

In case of eye contact:

irritant.

Conjunctival redness.

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Not relevant

Interactive effects:

Not relevant

Absence of specific data:

No data is available on the product itself. Description of possible hazardous to health effects is based on experience and/or toxicological characteristics of several components.

However, some datas are not complete regarding particular main components. Nevertheless according to the experience of the manufacturer there are no other hazards expected then those which are already mentioned on the label.

Mixture versus substance information:

Not relevant

## **Acute toxicity**

Based on available data, the classification criteria are not met.

CAS No	Chemical name						
	Exposure route	Dose		Species	Source	Method	
97043-91-9	alcohols, C9-16, ethoxylate	ed					
	oral	LD50 mg/kg	588,2	ATE	Supplier		
68439-50-9	alcohols, C12-14, ethoxyla	ted					
	oral	LD50 2000 mg/kg	> 300 - <	Rat	Supplier		
78330-20-8	alcohols, C9-11-iso-, C10-rich, ethoxylated						
	oral	LD50 2000 mg/kg	> 300 - <	Rat	Supplier		
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)						
	oral	LD50 mg/kg	64 - 66	Rat	ECHA / Supplier	OECD 401	
	dermal	LD50 mg/kg	> 87	Rat	ECHA	OECD 402	
	inhalation vapour	ATE	0,5 mg/l				
	inhalation (4 h) aerosol	LC50 mg/l	> 0,33	Rat	ECHA	OECD 403	

Irritation and corrosivity





according to UK REACH Regulation

## **ACMOS 100-5030**

Revision date: 24.06.2021 Page 13 of 20

Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

#### Sensitising effects

Contains reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

#### Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

#### STOT-single exposure

Based on available data, the classification criteria are not met.

#### STOT-repeated exposure

Based on available data, the classification criteria are not met.

#### Aspiration hazard

Based on available data, the classification criteria are not met.

#### 11.2. Information on other hazards

## **Endocrine disrupting properties**

Endocrine disrupting potential (Health):

not applicable

# **SECTION 12: Ecological information**

#### 12.1. Toxicity

Aquatic toxicity:

Acute (short-term) fish toxicity:

There are no data available on the preparation/mixture itself. The product has not been tested.

Acute (short-term) toxicity to crustacea:

There are no data available on the preparation/mixture itself. The product has not been tested.

Acute (short-term) toxicity to algae and cyanobacteria:

There are no data available on the preparation/mixture itself. The product has not been tested.

Chronic (long-term) toxicity to aquatic invertebrate:

There are no data available on the preparation/mixture itself. The product has not been tested.

Chronic (long-term) fish toxicity:

There are no data available on the preparation/mixture itself. The product has not been tested.  $\label{eq:product}$ 

Toxicity to other aquatic plants/organisms:

No data available (Substances/Ingredient)

# Terrestrial toxicity:

Acute and subchronic bird toxicity:

No data available (Substances/Ingredient)

Bird reproduction toxicity:

No data available (Substances/Ingredient)

Acute earthworm toxicity:

No data available (Substances/Ingredient)

Chronical earthworm toxicity (reproduction):

No data available (Substances/Ingredient)

Useful insect toxicity:

No data available (Substances/Ingredient)

Acute plant toxicity:

No data available (Substances/Ingredient)

Chronic plant toxicity:

No data available (Substances/Ingredient)

Toxicity to soil macroorganisms except of arthropods:

No data available (Substances/Ingredient)

Effects on soil microorganisms:

No data available (Substances/Ingredient)

Behaviour in waste water treatment plants:

No data available

Observe local regulations concerning effluent treatment.



according to UK REACH Regulation

## **ACMOS 100-5030**

Revision date: 24.06.2021 Page 14 of 20

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method
97043-91-9	alcohols, C9-16, ethoxylated	1					
	Acute fish toxicity	LC50	4,3 mg/l	96 h	Leuciscus idus	Supplier	DIN 38412 p11 [48h]
	Acute crustacea toxicity	EC50	3,7 mg/l	48 h	Daphnia	Supplier	DIN 38412 p15 [24h]
68439-50-9	alcohols, C12-14, ethoxylate	ed					
	Acute fish toxicity	LC50 mg/l	1 - 10	96 h	fish	Supplier	
	Acute algae toxicity	ErC50 mg/l	1 - 10	72 h	algae	Supplier	
	Acute crustacea toxicity	EC50 mg/l	1 - 10	48 h	daphnia	Supplier	
	Algae toxicity	NOEC mg/l	0,1 - 1		algae	Supplier	
78330-20-8	alcohols, C9-11-iso-, C10-rich, ethoxylated						
	Acute fish toxicity	LC50 mg/l	10 - 100	96 h	fish	Supplier	
	Acute algae toxicity	ErC50 mg/l	10 - 100	96 h	algae	Supplier	
	Acute crustacea toxicity	EC50 mg/l	10 - 100	48 h	daphnia	Supplier	
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)						
	Acute fish toxicity	LC50	0,19 mg/l	96 h	Oncorhynchus mykiss	ECHA	EPA OPP 72-1
	Acute algae toxicity	ErC50 mg/l	0,037	72 h	Skeletonema costatum	ECHA	OECD 201
	Acute crustacea toxicity	EC50	0,16 mg/l	48 h	Daphnia magna	ECHA	EPA OPP 72-2
	Fish toxicity	NOEC mg/l	0,0464	35 d	Danio rerio	ECHA	OECD 210
	Algae toxicity	NOEC mg/l	0,004	3 d	Skeletonema costatum	ECHA	OECD 201
	Crustacea toxicity	NOEC mg/l	0,0111	21 d	Daphnia magna	ECHA	OECD 211
	Acute bacteria toxicity	(4,5 mg/l)		3 h	Activated sludge	ECHA	OECD 209

# 12.2. Persistence and degradability

Abiotic degradation:

Physicochemical elimination:

Oxidation:

not applicable (Mixtures)

No data available (Substances/Ingredient)

Hydrolysis:

not applicable (Mixtures)

No data available (Substances/Ingredient)

Photochemical elimination:

Photolysis:

not applicable (Mixtures)

No data available (Substances/Ingredient)

Ozonolysis:

not applicable (Mixtures)

No data available (Substances/Ingredient)

Biodegradation:

not applicable (Mixtures)



according to UK REACH Regulation

## **ACMOS 100-5030**

Revision date: 24.06.2021 Page 15 of 20

CAS No	Chemical name						
	Method	Value	d	Source			
	Evaluation		•				
97043-91-9	alcohols, C9-16, ethoxylated						
	OECD 301 D	> 60 %	10	Supplier			
	readily biodegradable	=	•				
68439-50-9	alcohols, C12-14, ethoxylated						
	OECD 301 D	> 60 %	28	Supplier			
	readily biodegradable						
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)						
	OECD 301 B (CO2 Evolution Test)	> 38%	29	ECHA			
	readily biodegradable, but failing 10-day window						
	OECD 303 A (Activated sludge Units)	> 80%		Supplier			
	readily biodegradable						
	OECD 302 B (Zahn-Wellns Test)	100%		Supplier			
	readily biodegradable						

# 12.3. Bioaccumulative potential

not applicable (Mixtures)

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	0,401

## BCF

CAS No	Chemical name	BCF	Species	Source
	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	54	Lepomis macrochirus	ECHA

# 12.4. Mobility in soil

Surface tension:

See under section 9.1 - Information on basic physical and chemical properties.

# Distribution:

Water-air (volatility rate, Henry-constant):

not applicable (Mixtures)

No data available (Substances/Ingredient)

Soil-Water (Adsorption coefficient):

not applicable (Mixtures)

No data available (Substances/Ingredient)

Soil-Air (volatility rate):

not applicable (Mixtures)

No data available (Substances/Ingredient)

## 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

# 12.6. Endocrine disrupting properties

Endocrine disrupting potential (Environment):

not applicable

# 12.7. Other adverse effects

Ozone depletion potential (ODP):

No data available (Substances/Ingredient)

Photochemical ozone creation potential (POCP):

No data available (Substances/Ingredient)

Global warming potential (GWP):

No data available (Substances/Ingredient)

Endocrine disrupting potential

No data available



according to UK REACH Regulation

#### **ACMOS 100-5030**

Revision date: 24.06.2021 Page 16 of 20

AOX: The product contains organic halogens

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

#### 13.1. Waste treatment methods

#### Disposal recommendations

Waste treatment options:

Transfer to an emulsion fission reactor or an emulsion evaporation system, observing official regulations.

Dispose of waste according to applicable legislation.

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Properties of waste which render it hazardous:

Irritant — skin irritation and eye damage

Evidence for disposal must be provided.

Consult the appropriate local waste disposal expert about waste disposal.

Waste for recycling is to be classified and labelled.

For recycling, contact recycling exchanges.

May not be disposed or deposited together with domestic garbage.

Do not mix with other wastes.

Do not flush into surface water or sanitary sewer system.

Do not dispose of waste into sewer.

Before discharge in public drains (e.g. residues of washing- and rinsing liquids) please observe the relevant regulations. In case of further questions please contact your waste- or environmental representative or the responsible authority.

Clean IBCs or drums at approved facility only.

The waste producer is resposible for correct coding and designation of his wastes.

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

List of proposed waste codes/waste designations in accordance with EWC:

# List of Wastes Code - residues/unused products

070201 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of plastics, synthetic rubber

and man-made fibres; aqueous washing liquids and mother liquors; hazardous waste

#### List of Wastes Code - used product

070201 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of plastics, synthetic rubber

and man-made fibres; aqueous washing liquids and mother liquors; hazardous waste

# List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE

CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

# Contaminated packaging

Other disposal recommendations:

Contaminated packages must be completely emptied and can be re-used following proper cleaning.

Cleaning by recycling company.

Recommended cleansing agent:

Clean with detergents. Avoid solvent cleaners.

Handle contaminated packages in the same way as the substance itself.

Non-contaminated packages may be recycled.

Packing which cannot be properly cleaned must be disposed of.

As well uncleaned (empty) containers remain contaminated by product residues and may be hazardous by vapours. They have to be disposed by specialists or have to be supplied to a licensed reconditioning.

The conditions of the regional reconditioning companies have to be observed

## **SECTION 14: Transport information**

# Land transport (ADR/RID)

# Other applicable information (land transport)

Not classified as dangerous in the meaning of transport regulations.

#### Inland waterways transport (ADN)

## Other applicable information (inland waterways transport)

Not classified for this transport carrier.

# Marine transport (IMDG)

# Other applicable information (marine transport)

Not classified as dangerous in the meaning of transport regulations.



according to UK REACH Regulation

## **ACMOS 100-5030**

Revision date: 24.06.2021 Page 17 of 20

## Air transport (ICAO-TI/IATA-DGR)

## Other applicable information (air transport)

Not classified as dangerous in the meaning of transport regulations.

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

#### 14.6. Special precautions for user

not relevant

## 14.7. Maritime transport in bulk according to IMO instruments

not relevant

#### Other applicable information

not relevant

## **SECTION 15: Regulatory information**

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

#### EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3

2010/75/EU (VOC): 0 % (0 g/l)

#### Additional information

Authorisations and/or restrictions on use:

Authorisations:

Authorisation of Chemicals (REACH) as regards Annex XIV:

not relevant

Restrictions on use:

Restriction of chemicals (REACH) as regards annex XVII:

not relevant

Other regulations (EU):

Regulation (EC) No. 1005/2009 - Substances that deplete the ozone layer:

not relevant

Regulation (EC) No. 648/2004 and No 907/2006 - Detergents:

not relevant

Regulation (EC) No. 649/2012 - Export and import of dangerous chemicals:

not relevant

Regulation (EU) 2019/1021 - Persistent organic pollutants:

not relevant

Regulation (EC) No. 428/2009 and No. 388/2012 and No. 1382/2014 - Control of exports, or transfer, brokering and transit of dual-use goods (Dual-Use Regulation):

not relevant

Regulation (EC) No. 273/2004 - Drug precursors:

not relevant

Regulation (EC) No. 111/2005 - Definition of rules for the monitoring of trade in drug precursors between the Union and third countries:

not relevant

Directive 2012/18/EC - Control of major accident hazards involving dangerous substances (Seveso III):

not relevant

Directive 2004/42/EC - Use of organic solvents in certain paints and lacquers:

not relevant

Directive 2010/75/EU - Industrial Emissions Directive (Directive IE) - succession to Directive 1999/13/EC - Limitation of emissions of volatile organic compounds (VOC-Directive):

When using this substance / mixture it has to be checked whether the activities are subject to the the requirements of IE-RL, Chapter V (installations and activities with the use of organic solvents - VOC).

Aerosol directive (75/324/EEC):

not relevant

Biocide directive (98/8/EC):

not relevant

Regulation (EU) No. 528/2012 on biocides

In accordance with Regulation (EU) No. 528/2012 on biocides

This product is a with biocidal products treated article.

Observe in addition any national regulations!





according to UK REACH Regulation

#### **ACMOS 100-5030**

Revision date: 24.06.2021 Page 18 of 20

EC-Chemical inventories: All ingredients are listed in EINECS / ELINCS or excepted from listing.

## National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work

protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Additional information

Other regulations, restrictions and prohibition regulations:

European product inventories (Registration status on mixtures):

Kemikalieinspektionen / Produktregistret / Swedish Chemicals Inspectorate - Keml (http://www.kemi.se):

This product was not registered.

Schweizerische Eidgenossenschaft - Bundesamt für Gesundheit - BAG (http://www.bag.admin.ch) / Anmeldestelle Chemikalien (http://www.cheminfo.ch) / Informationssystem für gefährliche und umweltrelevante Stoffe - IGS (http://igs.naz.ch/index.html):

This product was registered.

International chemical inventories (Registration status on substances): No data available

# 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

# **SECTION 16: Other information**

# Changes

This version replaces all former issues.

Changes made in this revision see section: 1, 15.

#### Abbreviations and acronyms

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

ATE: Acute Toxicity Estimate.

CAS: Chemical Abstracts Service.

CEN: Comité Européen de Normalisation (European Committee for Standardisation).

CLP: Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008.

C&L: Classification & Labeling.

DNEL: Derived No-Effect Level.

EAK: European Waste Catalogue (replaced by LoW - see below).

EC50: Effective concentration, 50 percent.

ECHA: European Chemicals Agency.

EC: European community.

EINECS: European Inventory of Existing Commercial Chemical Substances.

ELINCS: European List of Notified Chemical Substances.

EN: European standard.

EWC: European Economic Community.

EEA: European Economic Area (EU + Iceland, Liechtenstein and Norway).

EU: European Union.

GHS: Globally Harmonized System of Classification and Labelling of Chemicals.

IATA-DGR: International Air Transport Association Dangerous Goods Regulations.

IBC-Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (International Bulk Chemical Code).

IC50 / ErC50: Inhibitory concentration, 50 percent.

ICAO-TI: International Cicil Aviation Organization Technical Instruction.

IMDG: International Maritime Dangerous Goods.



according to UK REACH Regulation

## **ACMOS 100-5030**

Revision date: 24.06.2021 Page 19 of 20

 $\label{eq:ISO:A} \textbf{ISO: A standard of International Standards Organisation}.$ 

IUPAC: International Union for Pure and Applied Chemistry.

LC50: Lethal concentration, 50 percent.

LD50: Lethal Dose, 50 percent.

log Kow (Pow): octanol-water partition coefficient.

LoW: List of Wastes (see http://ec.europa.eu/environment/waste/framework/list.htm).

MARPOL: Maritime Polluntion Convention (Convention for the Prevention of Pollution from Ships).

OC: Operational Conditions.

OECD: Organisation for Economic Co-operation and Development.

OSHA: Occupational Safety and Health Agency.

PBT: Persistent, bioaccumulabe and toxic.

PEC: Predicted Effect Concentration.

PNEC: Predicted No-Effect Concentration.

PPE: Personal Protection Equipment.

(Q)SAR: Quantitative-Structure-Activity-Relationship.

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals; Regulation (EC) No 1907/2006.

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.

RMM: Risk Management Measure.

STEL: Short time exposure limit.

SVHC: Substances of Very High Concern.

STOT - RE: Specific Target Organ Toxicity - Repeated Exposure.

Toxic if swallowed.

STOT - SE: Specific Target Organ Toxicity - Single Exposure.

TWA: Time Weighted Average.

vPvB: Very persistent and very bioaccumulable.

WoE: Weight of Evidence.

For abbreviations and acronyms, see table at http://abbrev.esdscom.eu

#### Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Eye Irrit. 2; H319	Calculation method

### Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.
EUH208	Contains reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one
	(3:1). May produce an allergic reaction.

# **Further Information**

H301

Full text of all R-, H-, EUH-phrases which are referred to in section 2 and 3 of this safety data sheet - see previous list. These (this) R-, H-, EUH-phrases/R-, H-, EUH-phrase apply/applies to the substance(s) of content, however, it does not necessarily show the classification of the product.

Key literature references and sources for data:

The classification corresponds to current EC-lists, but is completed by statements of technical literature and company data.

Other public accessible sources:

Regulation (EC) No. 1907/2006 (REACH) in the valid version in each case Regulation (EC) No. 1272/2008 (CLP) in the valid version in each case

Further information and practical guides on the internet:

European Chemicals Agency - ECHA (http://echa.europa.eu)

ECHA - Information on Chemicals (http://echa.europa.eu/information-on-chemicals)

ECHA - Candidate List of Substances of Very High Concern for Authorisation





according to UK REACH Regulation

## **ACMOS 100-5030**

Revision date: 24.06.2021 Page 20 of 20

(http://echa.europa.eu/de/candidate-list-table)

ECHA - List of restrictions table

(http://echa.europa.eu/de/addressing-chemicals-of-concern/restrictions/list-of-restrictions/list-of-restrictions-table)

ECHA - Authorisation List

(http://echa.europa.eu/hr/addressing-chemicals-of-concern/authorisation/recommendation-for-inclusion-in-the-authorisation-list/authorisation-list)

ECHA - C&L Inventory (http://echa.europa.eu/en/web/guest/regulations/clp/cl-inventory)

eChemPortal (http://www.echemportal.org)

The access to European Union law - EUR-Lex (http://eur-lex.europa.eu)

Health and Safety Executive (http://www.hse.gov.uk) / Control of Substances Hazardous to Health Regulations - COSHH (http://www.coshh-essentials.org.uk/Home.asp)

Pollution Prevention and Control Act and Pollution Prevention and Control Regulations

# Recommended restriction of application:

See under section 1.2 - Uses advised against.

Use this product only for intended purpose in accordance with our product informations.

Please refer to our internet website for more information (http://www.acmos.com).

### Training advice:

Yearly briefing and instruction of employees by means of operating instructions according to article 8 of EC-directive 98/24/EC.

Inquiry office: Laboratory (Division: Occupational-/Product security)

Contact person: Mr. Dryhaus (Telephone: +49-421-5189-0, Telefax: +49-421-5189-871)

Office hours: Mo - Th from 7.30 - 16.15 h and Fr from 7.30 - 13.30 h. Out of office hours no call diversion.

#### Disclaimer:

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The information contained herein are, to our knowledge at the time of their creation to be correct and been taken from sources deemed to be reliable. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release The receiver of our product is singularly responsible for adhering to existing laws and regulations. All descriptions are approximate values, they are not specified for construction of specifications. This safety data sheet does not represent any operating instruction according to national chemical regulations. It may be used for creation, but must not replace it. The employer is not relieved from his duties. All technical information to occupational protection are directed predominately to experts first (safety engineers, occupational medicines).