according to Regulation (EC) No. 1907/2006 - GB



# Klüberplex BE 31-502

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

1.1 Product identifier

Product name : Klüberplex BE 31-502

Article-No. : 017126

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

Use of the Sub- : Grease

stance/Mixture

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@kluphor.com

info@klueber.com

E-mail address of person : mcm@klueber.com

responsible for the SDS Material Compliance Management

National contact : Klüber Lubrication Great Britain Limited

Unit 10 Pennine Business Park

Longbow Close Huddersfield

West Yorkshire HD2 1GQ

**Great Britain** 

Tel: +44-1422-205115 Fax: +44-1422-206073 sales@uk.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)

Not a hazardous substance or mixture.



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#### 2.2 Label elements

## Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

#### **Additional Labelling**

EUH210 Safety data sheet available on request.

#### 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.

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

#### 3.2 Mixtures

Chemical nature : Mineral oil.

special calcium soap

### Components

Chemical name	CAS-No. EC-No.	Classification	Concentration limits M-Factor	Concentration (% w/w)
	Index-No.		Notes	
	Registration number			
1,3,4-Thiadiazolidine- 2,5-dithione, reaction products with hydro- gen peroxide and tert-	939-692-2	Aquatic Chronic3; H412		>= 1 - < 2.5
dodecanethiol	01-2119983498-16- XXXX			

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 breathing is irregular or stopped, administer artificial respira-

tion.

In case of skin contact : Remove contaminated clothing. If irritation develops, get med-

ical attention.

Wash off with soap and water.



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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.

If swallowed : Move the victim to fresh air.

Do not induce vomiting without medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

Risks : None known.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

## **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

Specific hazards during fire-

fighting

Fire may cause evolution of:

Carbon oxides Metal oxides

Nitrogen oxides (NOx)

Sulphur 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.

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

## 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas.

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



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(dust).

Do not breathe vapours, aerosols.

Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions : Try to prevent the material from entering drains or water

courses.

Local authorities should be advised if significant spillages

cannot be contained.

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 : For personal protection see section 8.

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

plication area.

Wash hands and face before breaks and immediately after

handling the product.

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.

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

Contains no substances with occupational exposure limit values.

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



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Substance name	End Use	Exposure routes	Potential health effects	Value
residual oils (petrole- um), hydrotreated	Workers	Inhalation	Long-term systemic effects	2.7 mg/m3
	Workers	Inhalation	Acute systemic effects	5.6 mg/m3
	Workers	Skin contact	Long-term systemic effects	1 mg/kg
1,3,4-Thiadiazolidine- 2,5-dithione, reaction products with hydro- gen peroxide and tert- dodecanethiol	Workers	Inhalation	Long-term systemic effects	4.408 mg/m3
	Workers	Skin contact	Long-term systemic effects	6.25 mg/kg bw/day
bis(4-(1,1,3,3- tetramethyl- butyl)phenyl)amine	Workers	Inhalation	Long-term systemic effects	4.11 mg/m3
	Workers	Skin contact	Long-term systemic effects	1.17 mg/kg bw/day

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

Substance name	Environmental Compartment	Value
1,3,4-Thiadiazolidine-2,5-	Fresh water	0.041 mg/l
dithione, reaction products with		
hydrogen peroxide and tert-		
dodecanethiol		
	Marine water	0.0041 mg/l
	Intermittent use/release	0.41 mg/l
	Microbiological Activity in Sewage Treat-	8000 mg/l
	ment Systems	
	Fresh water sediment	380.62 mg/kg
	Marine sediment	38.06 mg/kg
	Soil	308.98 mg/kg
	Oral	6.67 mg/kg
bis(4-(1,1,3,3-	Fresh water	0.00002 µg/l
tetramethylbutyl)phenyl)amine		
	Marine water	0.000002 μg/l
	Fresh water sediment	0.00467 mg/kg
	Marine sediment	0.000467 mg/kg
	Soil	0.000934 mg/kg

# 8.2 Exposure controls

## **Engineering measures**

none

## Personal protective equipment

Eye protection : Tightly fitting safety goggles

Hand protection

Material : Nitrile rubber Break through time : > 10 min



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Protective index : Class 1

Remarks : For prolonged or repeated contact use 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.

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.

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the spe-

cific work-place.

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

## 9.1 Information on basic physical and chemical properties

Appearance : paste

Colour : brown

Odour : characteristic

Odour Threshold : No data available

pH : No data available

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : No data available

Evaporation rate : No data available

Flammability (solid, gas) : Combustible Solids

Upper explosion limit / Upper

flammability limit

No data available



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Lower explosion limit / Lower

flammability limit

: No data available

Vapour pressure : < 0.001 hPa (20 °C)

Relative vapour density : No data available

Density : 0.96 g/cm3

(20 °C)

Bulk density : No data available

Solubility(ies)

Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : No data available

Explosive properties : Not explosive

Oxidizing properties : No data available

9.2 Other information

Sublimation point : No data available

Self-ignition : 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.



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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 toxicological effects

## **Acute toxicity**

Product:

Acute inhalation toxicity : Remarks: This information is not available.

#### **Components:**

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-dodecanethiol:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 2.75 mg/l

Exposure time: 4 h
Test atmosphere: vapour

Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Remarks: An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum

achievable concentration.

Information given is based on data obtained from similar sub-

stances.

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Remarks: Information given is based on data obtained from

similar substances.

#### Skin corrosion/irritation

**Product:** 

Remarks : This information is not available.



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## **Components:**

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-dodecanethiol:

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

## Serious eye damage/eye irritation

**Product:** 

Remarks : This information is not available.

#### **Components:**

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-dodecanethiol:

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:

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-dodecanethiol:

Test Type : Buehler Test Species : Guinea pig

Assessment : Did not cause sensitisation on laboratory animals.

Method : OECD Test Guideline 406

Result : Did not cause sensitisation on laboratory animals.

#### Germ cell mutagenicity

**Product:** 

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

### Components:

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-dodecanethiol:



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Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test

Test system: Chinese hamster fibroblasts

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

Result: negative

Remarks: Information given is based on data obtained from

similar substances.

Germ cell mutagenicity- As-

sessment

Tests on bacterial or mammalian cell cultures did not show

mutagenic effects.

Carcinogenicity

**Product:** 

Remarks : No data available

**Components:** 

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-dodecanethiol:

Carcinogenicity - Assess-

ment

: Not classifiable as a human carcinogen.

Reproductive toxicity

**Product:** 

Effects on fertility : Remarks: No data available

Effects on foetal develop-

ment

Remarks: No data available

**Components:** 

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-dodecanethiol:

Effects on fertility : Species: Rat

Application Route: Oral

General Toxicity - Parent: NOAEL: 1,000 mg/kg body weight General Toxicity F1: NOAEL: 1,000 mg/kg body weight

Method: OECD Test Guideline 421

Remarks: Information given is based on data obtained from

similar substances.

Reproductive toxicity - As-

sessment

: No toxicity to reproduction

Animal testing did not show any effects on foetal develop-

ment.

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## STOT - single exposure

#### Components:

# 1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-dodecanethiol:

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

organ toxicant, single exposure.

#### STOT - repeated exposure

#### Components:

# 1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-dodecanethiol:

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:**

# 1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-dodecanethiol:

Species : Rat NOAEL : 250 mg/kg

Application Route : Oral

Method : OECD Test Guideline 421

Remarks : Information given is based on data obtained from similar sub-

stances.

## **Aspiration toxicity**

#### **Product:**

This information is not available.

#### **Further information**

**Product:** 

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

the toxicology of similar products.

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# **SECTION 12: Ecological information**

#### 12.1 Toxicity

**Product:** 

Toxicity to fish : Remarks: No data available

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:**

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-dodecanethiol:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 1,000 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 41 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

Test Type: Growth inhibition Method: OECD Test Guideline 201

**Ecotoxicology Assessment** 

Acute aquatic toxicity : Harmful to aquatic life.

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

#### 12.2 Persistence and degradability

**Product:** 

Biodegradability : Remarks: No data available

Physico-chemical removabil- : Remarks: No data available

ity

## **Components:**

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-dodecanethiol:



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Biodegradability : Test Type: Primary biodegradation

Inoculum: activated sludge Result: Not readily biodegradable.

Biodegradation: 0 % Exposure time: 28 d

Method: OECD Test Guideline 301C

# 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:**

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-dodecanethiol:

Bioaccumulation : Species: Fish

Bioconcentration factor (BCF): 3.16

Partition coefficient: n-

octanol/water

log Pow: 8 (20 °C)

# 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...

# 12.6 Other adverse effects

**Product:** 

Additional ecological infor-

mation

: No information on ecology is available.



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## **SECTION 13: Disposal considerations**

13.1 Waste treatment methods

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

courses or the soil.

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

# **SECTION 14: Transport information**

#### 14.1 UN number

ADR : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA : Not regulated as a dangerous good

14.2 UN proper shipping name

ADR : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA : Not regulated as a dangerous good

14.3 Transport hazard class(es)

ADR : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA : Not regulated as a dangerous good

14.4 Packing group

ADR : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good



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IATA (Cargo) : Not regulated as a dangerous good
IATA (Passenger) : Not regulated as a dangerous good

14.5 Environmental hazards

ADR : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA (Passenger) : Not regulated as a dangerous good

IATA (Cargo) : Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Remarks : Not applicable for product as supplied.

## **SECTION 15: Regulatory information**

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

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

This product does not contain substances of very high concern (Regu-

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

Article 57).

REACH - List of substances subject to authorisation

(Annex XIV)

Not applicable

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

plete the ozone layer

Not applicable

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

tants (recast)

Not applicable

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

of dangerous chemicals

Not applicable

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances,

preparations and articles (Annex XVII)

Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Not applicable

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

emissions (integrated pollution prevention and control)

Not applicable



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#### 15.2 Chemical safety assessment

This information is not available.

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

**Full text of H-Statements** 

H412 : Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

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; AICS - Australian Inventory of Chemical Substances; 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; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

#### **Further information**

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ternet) is not permitted without our express written consent. We provide our customers with amended safety data sheets as prescribed by law. The customer is responsible for passing on safety data sheets and any amendments contained therein to its own customers, employees and other users of the product. We provide no guarantee that safety data sheets received by users from third parties are up-to-date. All information and instructions in this safety data sheet have been compiled to the best of our knowledge and are based on the information available to us on the day of publication. The information provided is intended to describe the product in relation to the required safety measures; it is neither an assurance of characteristics nor a guarantee of the product's suitability for particular applications and does not justify any contractual legal relationship. The existence of a safety data sheet for a particular jurisdiction does not necessarily mean that import or use within that jurisdiction is legally permitted. If you have any questions, please contact your responsible sales contact or authorized trading partner.