

mikrozid® universal wipes **No Change Service!**

Version: 02.04 Revision Date: 11.01.2019 Date of last issue: 09.07.2018
Date of first issue: 19.10.2015

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

Trade name : mikroqid® universal wipes

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

Use of the Sub-stance/Mixture : Disinfectants and general biocidal products

Recommended restrictions on use : Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet

Manufacturer/ Supplier : Schülke & Mayr GmbH
Robert-Koch-Str. 2

22851 Norderstedt
Germany
Telephone: +49 (0)40/ 52100-0
Telefax: +49 (0)40/ 52100318
mail@schuelke.com
www.schuelke.com

E-mail address of person responsible for the SDS/Contact person : Application Department
+49 (0)40/ 521 00 8800
ApplicationDepartment.SM@schuelke.com
(Schülke & Mayr UK Ltd.: +44-1142543500)

1.4 Emergency telephone number

Emergency telephone number : UK Poisons Emergency number: 0870 600 6266

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification (REGULATION (EC) No 1272/2008)**

Flammable liquids, Category 3 H226: Flammable liquid and vapour.

Eye irritation, Category 2 H319: Causes serious eye irritation.

2.2 Label elements**Labelling (REGULATION (EC) No 1272/2008)**

Hazard pictograms :



Signal word : Warning

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

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mikrozid® universal wipes

No Change Service!

Version
02.04

Revision Date:
11.01.2019

Date of last issue: 09.07.2018
Date of first issue: 19.10.2015

- Hazard statements : H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.
- Precautionary statements : P102 Keep out of reach of children.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
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.
P501 Dispose of contents/ container to an approved waste disposal plant.
- Special labelling of certain mixtures : Labelling according to Regulation (EC) No. 648/2004: (< 5 % anionic surfactants)
- Further information : Use biocides safely. Always read the label and product information before use.

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 : Aqueous, alcohol containing solution on non-woven

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Propan-2-ol	67-63-0 200-661-7 603-117-00-0 01-2119457558-25-XXXX	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	17,4
Ethanol	64-17-5 200-578-6 603-002-00-5 01-2119457610-43-XXXX	Flam. Liq. 2; H225 Eye Irrit. 2; H319	12,6

For explanation of abbreviations see section 16.

mikroZid® universal wipes**No Change Service!**Version
02.04Revision Date:
11.01.2019Date of last issue: 09.07.2018
Date of first issue: 19.10.2015

SECTION 4: First aid measures**4.1 Description of first aid measures**

- If inhaled : Move the victim to fresh air and keep him calm.
If symptoms persist, call a physician.
- In case of skin contact : Wash with water and soap as a precaution.
If skin irritation persists, call a physician.
- In case of eye contact : Rinse thoroughly with plenty of water, also under the eyelids.
Obtain medical attention.
- If swallowed : If accidentally swallowed obtain immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : Treat symptomatically.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : For specialist advice physicians should contact the Poisons Information Service.
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SECTION 5: Firefighting measures**5.1 Extinguishing media**

- Suitable extinguishing media : Dry powder
Alcohol-resistant foam
Carbon dioxide (CO₂)
Water spray jet
- Unsuitable extinguishing media : Foam
Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

- Specific hazards during fire-fighting : Cool closed containers exposed to fire with water spray.
- Hazardous combustion products : No hazardous combustion products are known

5.3 Advice for firefighters

- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
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SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

- Personal precautions : Remove all sources of ignition.
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SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

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mikrozid® universal wipes

No Change Service!

Version
02.04

Revision Date:
11.01.2019

Date of last issue: 09.07.2018

Date of first issue: 19.10.2015

Avoid contact with eyes.

6.2 Environmental precautions

Environmental precautions : No special environmental precautions required.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Use mechanical handling equipment.

6.4 Reference to other sections

see Section 8 + 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Wear personal protective equipment.
Ensure adequate ventilation.

Advice on protection against fire and explosion : Keep away from sources of ignition - No smoking.

Hygiene measures : Keep away from food and drink.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store at room temperature in the original container.

Further information on storage conditions : Keep container tightly closed. Keep away from direct sunlight.
Recommended storage temperature: 15 - 25°C

Advice on common storage : Do not store together with oxidising agents.

7.3 Specific end use(s)

Specific use(s) : none

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

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

Substance name	End Use	Exposure routes	Potential health effects	Value
Propan-2-ol	Workers	Skin contact	Long-term exposure, Systemic effects	888 mg/kg
	Workers	Inhalation	Long-term exposure, Systemic effects	500 mg/m ³
Ethanol	Workers	Inhalation	Acute effects, Local effects	1900 mg/m ³
	Workers	Skin contact	Chronic effects	343 mg/kg

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

schülke 

mikroZid® universal wipes **No Change Service!**

Version Revision Date: Date of last issue: 09.07.2018
02.04 11.01.2019 Date of first issue: 19.10.2015

	Workers	Inhalation	Chronic effects	950 mg/m ³
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Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Propan-2-ol	Fresh water	140,9 mg/l
	Marine water	140,9 mg/l
	Fresh water sediment	552 mg/kg
	Marine sediment	552 mg/kg
	Soil	28 mg/kg
	Intermittent use/release	140,9 mg/l
	Effects on waste water treatment plants	2251 mg/l
Ethanol	Oral	160 mg/kg food
	Fresh water	0,96 mg/l
	Marine water	0,79 mg/l
	Fresh water sediment	3,6 mg/kg
	Soil	0,63 mg/kg

8.2 Exposure controls

Personal protective equipment

- Eye protection : If splashes are likely to occur, wear:
Goggles
- Hand protection : Prolonged contact: Nitrile rubber gloves e.g. Camatril (>120 Min., layer thickness: 0.40 mm) or butyl rubber gloves e.g. Butoject (>480 Min., layer thickness: 0.70 mm) made by KCL or gloves from other manufacturers offering the same protection.
- Protective measures : Avoid contact with skin and eyes.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance : Aqueous, alcohol containing solution on non-woven
- Colour : colourless
- Odour : alcohol-like
- Odour Threshold : not determined
- pH : 3 - 3,6
of the active solution
- Melting point/freezing point : < -5 °C
of the active solution
- Decomposition temperature : No data available
- Boiling point/boiling range : ca. 80 °C
of the active solution

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

schülke -t

mikrozyd® universal wipes

No Change Service!

Version
02.04

Revision Date:
11.01.2019

Date of last issue: 09.07.2018
Date of first issue: 19.10.2015

Flash point	:	26 °C Method: DIN 51755 Part 1 of the active solution
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Sustains combustion
Upper explosion limit / Upper flammability limit	:	12 %(V) Raw material
Lower explosion limit / Lower flammability limit	:	2 %(V) Raw material
Vapour pressure	:	ca. 40 hPa (20 °C) of the active solution
Vapour density	:	No data available
Relative density	:	ca. 0,95 g/cm ³ of the active solution
Solubility(ies) Water solubility	:	in all proportions (20 °C)
Partition coefficient: n- octanol/water	:	Not applicable
Auto-ignition temperature	:	No data available
Viscosity Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Hazardous reactions : None reasonably foreseeable.

10.4 Conditions to avoid

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

schülke -t

mikrozid® universal wipes

No Change Service!

Version
02.04

Revision Date:
11.01.2019

Date of last issue: 09.07.2018
Date of first issue: 19.10.2015

Conditions to avoid : Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Strong acids and oxidizing agents

10.6 Hazardous decomposition products

None reasonably foreseeable.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate: > 15.000 mg/kg
Remarks: of the active solution

Acute inhalation toxicity : Acute toxicity estimate: > 50 mg/l
Remarks: of the active solution

Acute dermal toxicity : Acute toxicity estimate: > 10.000 mg/kg
Remarks: of the active solution

Components:

Propan-2-ol:

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

Acute inhalation toxicity : LC50 (Rat): 39 mg/l
Exposure time: 4 h

Acute dermal toxicity : LD50 (Rabbit): > 5.000 mg/kg

Ethanol:

Acute oral toxicity : LD50 (Mouse): 8.300 mg/kg

Acute inhalation toxicity : LC50 (Mouse): 39 mg/l
Exposure time: 4 h

Acute dermal toxicity : LD50 (Rabbit): 20.000 mg/kg

Skin corrosion/irritation

Product:

Method : Calculation method
Remarks : No skin irritation

mikrozyd® universal wipes**No Change Service!**Version
02.04Revision Date:
11.01.2019

Date of last issue: 09.07.2018

Date of first issue: 19.10.2015

Components:**Propan-2-ol:**

Result : No skin irritation

Ethanol:

Species : Rabbit

Result : No skin irritation

Serious eye damage/eye irritation**Product:**

Assessment : Causes serious eye irritation.

Method : Calculation method

Components:**Propan-2-ol:**

Result : Causes serious eye irritation.

Ethanol:

Species : Rabbit

Assessment : Causes serious eye irritation.

Method : OECD Test Guideline 405

Respiratory or skin sensitisation**Components:****Propan-2-ol:**

Test Type : Buehler Test

Species : Guinea pig

Result : Did not cause sensitisation on laboratory animals.

Ethanol:

Test Type : Maximisation Test

Species : Guinea pig

Result : Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity**Product:**

Germ cell mutagenicity- Assessment : Not classified based on available information.

Components:**Propan-2-ol:**

Genotoxicity in vitro : Test Type: Ames test

Method: Mutagenicity (Escherichia coli - reverse mutation)

mikrozid® universal wipes**No Change Service!**Version
02.04Revision Date:
11.01.2019Date of last issue: 09.07.2018
Date of first issue: 19.10.2015assay)
Result: Non mutagenicGenotoxicity in vivo : Species: Mouse
Method: Mutagenicity (micronucleus test)
Remarks: Non mutagenic

Germ cell mutagenicity- Assessment : Not mutagenic in Ames Test

Ethanol:Genotoxicity in vitro : Method: OECD Test Guideline 471
Result: Not mutagenic in Ames Test

Genotoxicity in vivo : Remarks: Non mutagenic

Germ cell mutagenicity- Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Carcinogenicity**Product:**

Carcinogenicity - Assessment : May cause cancer if swallowed.

Components:**Propan-2-ol:**

Carcinogenicity - Assessment : Based on available data, the classification criteria are not met.

Ethanol:

Carcinogenicity - Assessment : Did not show carcinogenic effects in animal experiments.

Reproductive toxicity**Product:**

Reproductive toxicity - Assessment : May damage the unborn child.

Components:**Propan-2-ol:**Effects on foetal development : Species: Rat
Application Route: Oral
General Toxicity Maternal: NOAEL: 400 mg/kg body weight

Reproductive toxicity - Assessment : Based on available data, the classification criteria are not met.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

schülke -

mikrozid® universal wipes

No Change Service!

Version
02.04

Revision Date:
11.01.2019

Date of last issue: 09.07.2018
Date of first issue: 19.10.2015

Ethanol:

Effects on foetal development : Species: Rat
Application Route: Oral
General Toxicity Maternal: NOAEL: 2.000 mg/kg body weight

Reproductive toxicity - Assessment : In animal testing, risk of impaired fertility was shown only after administration of very high doses of this substance.

STOT - single exposure

Product:

Exposure routes : Inhalation
Target Organs : Central nervous system
Assessment : Causes damage to organs.

Components:

Propan-2-ol:

Assessment : May cause drowsiness or dizziness.

Ethanol:

Remarks : No data available

STOT - repeated exposure

Product:

Exposure routes : Inhalation
Target Organs : Liver, blood effects
Assessment : Causes damage to organs through prolonged or repeated exposure.

Components:

Propan-2-ol:

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

Ethanol:

Remarks : No data available

Repeated dose toxicity

Components:

Ethanol:

Species : Rat
NOAEL : 1.730 mg/kg
LOAEL : 3.160 mg/kg
Application Route : Oral
Exposure time : 90 d

mikrozid® universal wipes**No Change Service!**Version
02.04Revision Date:
11.01.2019Date of last issue: 09.07.2018
Date of first issue: 19.10.2015**Aspiration toxicity**

No data available

Further information**Product:**

Remarks : No data available

SECTION 12: Ecological information**12.1 Toxicity****Components:****Propan-2-ol:**Toxicity to fish : LC50 (Leuciscus idus): > 100 mg/l
Exposure time: 48 h
Test Type: static testToxicity to daphnia and other : EC50 (Daphnia magna): > 100 mg/l
aquatic invertebrates : Exposure time: 48 h
Test Type: static testToxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l
Exposure time: 72 h
Test Type: static test**Ethanol:**Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 8.140 mg/l
Exposure time: 48 hToxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): > 5.000 mg/l
aquatic invertebrates : Exposure time: 48 hToxicity to algae : IC50 (Scenedesmus quadricauda (Green algae)): > 100 mg/l
Exposure time: 72 h**12.2 Persistence and degradability****Components:****Propan-2-ol:**

Biodegradability : Result: Readily biodegradable.

Ethanol:

Biodegradability : Result: Readily biodegradable.

mikrozyd® universal wipes**No Change Service!**Version
02.04Revision Date:
11.01.2019

Date of last issue: 09.07.2018

Date of first issue: 19.10.2015

12.3 Bioaccumulative potential**Components:****Propan-2-ol:**

Bioaccumulation : Remarks: No bioaccumulation is to be expected (log Pow <= 4).

Partition coefficient: n-octanol/water : log Pow: 0,05 (20 °C)
Method: OECD Test Guideline 107**Ethanol:**

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : log Pow: -0,14
Method: Calculated value**12.4 Mobility in soil****Components:****Propan-2-ol:**

Mobility : Remarks: Mobile in soils

Ethanol:

Mobility : 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 information : No data is available on the product itself.

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

Product : Can be incinerated or landfilled together with household waste in compliance with the regulations, and after consultation with the waste disposal services.

Contaminated packaging : Take empty packaging to the recycling plant.

mikroZid® universal wipes**No Change Service!**Version
02.04Revision Date:
11.01.2019Date of last issue: 09.07.2018
Date of first issue: 19.10.2015

SECTION 14: Transport information**14.1 UN number****IMDG** : UN 3175
IATA (Cargo) : UN 3175**14.2 UN proper shipping name****IMDG** : SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S.
(Propan-2-ol, Ethanol)
IATA (Cargo) : SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S.
(Propan-2-ol, Ethanol)**14.3 Transport hazard class(es)****IMDG** : 4.1
IATA (Cargo) : 4.1**14.4 Packing group****IMDG**
Packing group : II
Labels : 4.1
EmS Code : F-A, S-I
IATA (Cargo)
Packing instruction (cargo aircraft) : 448
Packing group : II
Labels : Flammable Solid**14.5 Environmental hazards****IMDG**
Marine pollutant : no**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.
For personal protection see section 8.

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

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) : Not applicable

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

schülke -

mikrozyd® universal wipes

No Change Service!

Version
02.04

Revision Date:
11.01.2019

Date of last issue: 09.07.2018
Date of first issue: 19.10.2015

Regulation (EC) No 850/2004 on persistent organic pollutants : 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.
P5c FLAMMABLE LIQUIDS

Volatile organic compounds : Volatile organic compounds (VOC) content: 30 %
of the active solution, Directive 2010/75/EC on the limitation of emissions of volatile organic compounds

Other regulations:

The surfactant(s) contained in this mixture complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values.

Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products

15.2 Chemical safety assessment

Exempt

SECTION 16: Other information

Full text of H-Statements

H225 : Highly flammable liquid and vapour.
H319 : Causes serious eye irritation.
H336 : May cause drowsiness or dizziness.

Full text of other abbreviations

Eye Irrit. : Eye irritation
Flam. Liq. : Flammable liquids
STOT SE : Specific target organ toxicity - single exposure

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 - In-

mikrozyd® universal wipes**No Change Service!**Version
02.04Revision Date:
11.01.2019Date of last issue: 09.07.2018
Date of first issue: 19.10.2015

ternational 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

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) No. 1272/2008

Flam. Liq. 3, H226 : On basis of test data.
Eye Irrit. 2, H319 : Calculation method

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.