

Product Data Sheet ba 6 (*microbiocid+biodispersant*)

Use

ba 6 is a broad spectrum biocide with extremely environmental friendly profile and excellent biofilm removal capacities. **ba 6** has been specifically designed for control of planktonic and sessile biofilm micro-organisms in industrial recirculating cooling water systems, such as cooling towers and evaporating cooling towers.

Features

ba 6 is a THPS (Tetrakis(hydroxymethyl)phosphoniumsulfat) based biocide. BA6 is very potent against planktonic and sessile bacteria, SRB's, Legionella and algae. But it is also known for its environmental friendly character.

- low ecotoxicity to aquatic species
- readily biodegradable
- does not bio-accumulate)
- halogen free

Appearance:	colorless clear liquid
pH (neat):	3,3
Density:	1.110 kg/m ³
Freezing point:	0°C
Solubility:	complete

These data are to be seen as typical values and should not be considered as specifications.

Dosing

The recommended dosage and concentration depends on the biological contamination and the system size.

ba 6 can be dosed directly from the delivery container. The point of injection should be choosed in an area of the system with enough flow to distribute **ba 6**.

The standard dosing rate of **ba 6** is 200 g/m³.

Handling precautions

ba 6 should be handled with care, as all industrial chemicals. In case of skin contact, contaminated clothing should be removed and affected area should be washed with water. In case of eye contact, wash out with plenty of clean water for at least 15 minutes. Obtain medical attention. If you feel unwell, seek medical advice (show the label where possible). Before use review the Material Safety Data Sheet for additional information. Use **ba 6** safely. Always read label and product information before use.

Important info

Every our chemical products maintains a Material Safety Data Sheet. Material Safety Data Sheets contain health and safety information relevant for your development of appropriate product handling procedures to protect your employees and customers. The Material Safety Data Sheet should be read and understood by all of your supervisory personnel and employees before using gwk products in your facilities.

Packaging

ba 6 is available in 20kg drums.

All statements, information and data presented herein are believed to be accurate and reliable but are not to be taken as a guarantee, express warranty or implied warranty of merchantability of fitness for a particular purpose, or representation, express or implied, for which seller assumes legal responsibility, and they are offered solely for your consideration, investigation and verification. Statements or suggestions concerning possible use of this product are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe any patent.

gwk		
Safety Data Sheet		Revision Date: 18.04.2016
		Print Date: 19.07.2017
ba 6		Version: 2.1

Conforms to EU Regulation 1907/2006/EC as amended. - SDSGHS_DE

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

1.1 Product identifier

Trade name : ba 6

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

Use of the Substance/Mixture : Biocidal product

Recommended restrictions on use : For use in industrial installations only.
Restricted to professional users.

<p>1.3 Details of the supplier of the safety data sheet Gwk Gesellschaft Wärme Kältetechnik mbH Scherl 10 D-58540 Meinerzhagen Germany info@gwk.com</p>	<p>1.4 Emergency telephone number emergency telephone number Berlin +49 (0) 30 30686700 Product Information +49 2354 7060 0 Contact your local gwk representative</p>
---	--

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4	H302: Harmful if swallowed.
Acute toxicity, Category 4	H332: Harmful if inhaled.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Reproductive toxicity, Category 2	H361d: Suspected of damaging the unborn child.
Acute aquatic toxicity, Category 1	H400: Very toxic to aquatic life.
Chronic aquatic toxicity, Category 3	H412: Harmful to aquatic life with long lasting effects.

gwk		
Safety Data Sheet		Revision Date: 18.04.2016
		Print Date: 19.07.2017
ba 6		Version: 2.1

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

Hazard statements : H302 + H332 Harmful if swallowed or if inhaled
 H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.
 H361d Suspected of damaging the unborn child.
 H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
 P201 Obtain special instructions before use.
 P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
 P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
 P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

Hazardous components which must be listed on the label:

|| **Tetrakis(hydroxymethyl)phosphonium sulphate(2:1)**

2.3 Other hazards

Additional advice

No information available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
Tetrakis(hydroxymethyl)phosphonium sulphate(2:1)	55566-30-8 259-709-0	Acute Tox.4; H302 Acute Tox.3; H331 Eye Dam.1; H318 Skin Sens.1; H317 Repr.2; H361d Aquatic Acute1; H400 Aquatic Chronic2; H411	>= 15 - < 25

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : Move to fresh air.
IF INHALED: Call a POISON CENTER/doctor if you feel unwell.
Keep patient warm and at rest.
If unconscious place in recovery position and seek medical advice.
- In case of skin contact : Remove contaminated clothing. If irritation develops, get medical attention.
If on skin, rinse well with water.
First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.
Wash contaminated clothing before re-use.
- In case of eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Continue rinsing eyes during transport to hospital.
Remove contact lenses.
Protect unharmed eye.
- If swallowed : Obtain medical attention.
Do NOT induce vomiting.
Rinse mouth with water.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

gwk		
Safety Data Sheet		Revision Date: 18.04.2016
		Print Date: 19.07.2017
ba 6		Version: 2.1

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No symptoms known or expected.
- Risks : Harmful if swallowed or if inhaled
May cause an allergic skin reaction.
Causes serious eye damage.
Suspected of damaging the unborn child.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : No hazards which require special first aid measures.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Water spray
Foam
Carbon dioxide (CO₂)
Dry chemical
- Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- 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.
- Specific extinguishing methods : Product is compatible with standard fire-fighting agents.
- Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

gwk		
Safety Data Sheet		Revision Date: 18.04.2016
		Print Date: 19.07.2017
ba 6		Version: 2.1

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
 Ensure adequate ventilation.
 Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
 Comply with all applicable federal, state, and local regulations.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.
 Prevent further leakage or spillage if safe to do so.
 If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For further information see Section 8 and Section 13 of the safety data sheet.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Do not breathe vapours/dust.
 Do not smoke.
 Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
 Container hazardous when empty.
 Avoid exposure - obtain special instructions before use.
 Avoid contact with skin and eyes.
 Smoking, eating and drinking should be prohibited in the application area.
 For personal protection see section 8.
 Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Hygiene measures : Wash hands before breaks and at the end of workday. When using do not eat or drink. When using do not smoke.

gwk		
Safety Data Sheet		Revision Date: 18.04.2016
		Print Date: 19.07.2017
ba 6		Version: 2.1

7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.
- Storage class (TRGS 510) : 12, Non Combustible Liquids
- Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

- Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Engineering measures

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Personal protective equipment

Eye protection : Wear chemical splash goggles and face shield when there is potential for exposure of the eyes or face to liquid, vapor or mist.
Maintain eye wash station in immediate work area.

Hand protection

Remarks : butyl-rubber

The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Skin and body protection

: Wear as appropriate:
Impervious clothing
Safety shoes
Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Discard gloves that show tears, pinholes, or signs of wear.

gwk		
Safety Data Sheet		Revision Date: 18.04.2016
		Print Date: 19.07.2017
ba 6		Version: 2.1

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: Aqueous solution
Colour	: yellow
Odour	: No data available
Odour Threshold	: No data available
pH	: ca. 4,3, (25 °C)
Melting point/freezing point	: ca. -3 °C
Boiling point/boiling range	: ca. 108 °C Flash
point	: Not applicable
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: 23,33 hPa (20 °C) Calculated Vapor Pressure
Relative vapour density	: No data available
Relative density	: ca. 1,12
Density	: ca. 1,12 g/cm ³
Solubility(ies)	
Water solubility	: completely soluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Thermal decomposition	: No data available
Viscosity	

gwk		
Safety Data Sheet		Revision Date: 18.04.2016
		Print Date: 19.07.2017
ba 6		Version: 2.1

Viscosity, dynamic : Not applicable
 Viscosity, kinematic : No data available
 Oxidizing properties : No data available

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Product will not undergo hazardous polymerization.

10.4 Conditions to avoid

10.5 Incompatible materials

10.6 Hazardous decomposition products

Hazardous decomposition products : No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Information on likely routes of exposure : Inhalation
 Skin contact
 Eye Contact
 Ingestion

Acute toxicity

Harmful if swallowed or if inhaled

Product:

Acute oral toxicity : Assessment: The component/mixture is moderately toxic after single ingestion.

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

gwk		
Safety Data Sheet		Revision Date: 18.04.2016
		Print Date: 19.07.2017
ba 6		Version: 2.1

short term inhalation.

Components:

PHOSPHONIUM, TETRAKIS(HYDROXYMETHYL)-, SULFATE (2:1):

Acute oral toxicity : LD 50 (Rat): 575 mg/kg

Acute inhalation toxicity : LC 50 (Rat): 5,5 mg/l
Exposure time: 4 h

LC 50 (Rat): 0,59 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Remarks: Information given is based on data obtained from similar substances.

Skin corrosion/irritation

Not classified based on available information.

Product:

Remarks: May cause skin irritation in susceptible persons.

Components:

PHOSPHONIUM, TETRAKIS(HYDROXYMETHYL)-, SULFATE (2:1):

Species: Rabbit
Method: OECD Test Guideline 404
Result: Not irritating to skin

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Result: Risk of serious damage to eyes.

Remarks: May cause irreversible eye damage.

Components:

PHOSPHONIUM, TETRAKIS(HYDROXYMETHYL)-, SULFATE (2:1):

Species: Rabbit
Result: Risk of serious damage to eyes.

Respiratory or skin sensitisation

Skin sensitisation: May cause an allergic skin reaction.
Respiratory sensitisation: Not classified based on available information.

Product:

Remarks: May cause allergic skin reaction.

Components:**PHOSPHONIUM, TETRAKIS(HYDROXYMETHYL)-, SULFATE (2:1):**

Test Type: Maximisation Test

Assessment: May cause sensitisation by skin contact.

Method: OECD Test Guideline 406

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Suspected of damaging the unborn child.

Components:**PHOSPHONIUM, TETRAKIS(HYDROXYMETHYL)-, SULFATE (2:1):**

Reproductive toxicity -

Assessment

: Some evidence of adverse effects on development, based on animal experiments., Suspected of damaging the unborn child.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration hazard

Not classified based on available information.

Further information**Product:**

Remarks: No data available

SECTION 12: Ecological information**12.1 Toxicity****Product:**

Toxicity to algae

: EC50 (Skeletonema costatum (marine diatom)): Expected 0,5 mg/l
Exposure time: 96 h**Components:****Tetrakis(hydroxymethyl)phosphonium sulphate(2:1)**

Toxicity to fish

: LC 50 (Oncorhynchus mykiss (rainbow trout)): 119 mg/l
Exposure time: 96 h

	Test substance: 75% solution
	LC 50 (Lepomis macrochirus (Bluegill sunfish)): 93 mg/l
	Exposure time: 96 h
	Test substance: 75% solution
Toxicity to daphnia and other aquatic invertebrates	: EC 50 (Water flea (Daphnia magna)): 19,4 mg/l
	Exposure time: 48 h
	Test substance: 75% solution
Toxicity to algae	: EC 50 (Pseudokirchneriella subcapitata (green algae)): 0,20 mg/l
	Exposure time: 96 h
	Test substance: 75% solution
Toxicity to bacteria	: EC 50 (activated sludge): 24 mg/l
	Exposure time: 3 h
	Test substance: 75% solution
Toxicity to fish (Chronic toxicity)	: NOEC: 1,1 mg/l
	Exposure time: 32 d
	Species: Pimephales promelas (fathead minnow)
	Test substance: 75% solution
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC: 0,032 mg/l
	Exposure time: 21 d
	End point: Reproduction Test
	Species: Daphnia magna (Water flea)
	Test substance: 75% solution

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: Readily biodegradable

Components:

Tetrakis(hydroxymethyl)phosphonium sulphate(2:1)
Biodegradability : Result: Readily biodegradable

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: The bioaccumulation potential cannot be determined.

12.4 Mobility in soil

No data available

gwk		
Safety Data Sheet		Revision Date: 18.04.2016
		Print Date: 19.07.2017
ba 6		Version: 2.1

12.5 Results of PBT and vPvB assessment

Not relevant

12.6 Other adverse effects

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Very toxic to aquatic life., Harmful to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.

SECTION 14: Transport information

14.1 UN number

ADR: UN3082

ADNR: UN3082

RID: UN3082

INTERNATIONAL MARITIME DANGEROUS GOODS: UN3082

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: UN3082

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: UN3082

14.2 UN proper shipping name

ADR: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(TETRAKIS[HYDROXYMETHYL]PHOSPHONIUM SULFATE)

ADNR: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(TETRAKIS[HYDROXYMETHYL]PHOSPHONIUM SULFATE)

RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(TETRAKIS[HYDROXYMETHYL]PHOSPHONIUM SULFATE)

INTERNATIONAL MARITIME DANGEROUS GOODS: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TETRAKIS[HYDROXYMETHYL]PHOSPHONIUM SULFATE)

gwk		
Safety Data Sheet		Revision Date: 18.04.2016
		Print Date: 19.07.2017
ba 6		Version: 2.1

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Environmentally hazardous substance, liquid, n.o.s. (TETRAKIS[HYDROXYMETHYL]PHOSPHONIUM SULFATE)

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Environmentally hazardous substance, liquid, n.o.s. (TETRAKIS[HYDROXYMETHYL]PHOSPHONIUM SULFATE)

14.3 Transport hazard class(es)

ADR: 9

ADNR: 9

RID: 9

INTERNATIONAL MARITIME DANGEROUS GOODS: 9

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: 9

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: 9

14.4 Packing group

ADR: III

ADNR: III

RID: III

INTERNATIONAL MARITIME DANGEROUS GOODS: III

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: III

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: III

14.5 Environmental hazards

ADR: Environmentally hazardous

ADNR: Environmentally hazardous

RID: Environmentally hazardous

INTERNATIONAL MARITIME DANGEROUS GOODS: Environmentally hazardous, MARINE POLLUTANT

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Environmentally hazardous

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Environmentally hazardous

14.6 Special precautions for user

Not applicable

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

Ship Type: Not applicable Hazard

code(s): Not applicable Pollutant

Category: Not applicable

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

gwk		
Safety Data Sheet		Revision Date: 18.04.2016
		Print Date: 19.07.2017
ba 6		Version: 2.1

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 57) : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Not applicable

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.

		Quantity 1	Quantity 2
E1	ENVIRONMENTAL HAZARDS	100 t	200 t

Water contaminating class (Germany) : WGK 3 highly water endangering

TA Luft List (Germany) :

- Total dust, Not applicable
- Inorganic substances in powdered form, Not applicable
- Inorganic substances in vapour or gaseous form, Not applicable
- Organic Substances, Not applicable
- Carcinogenic substances, Not applicable
- Mutagenic, Not applicable
- Toxic to reproduction, Not applicable

Other regulations : Young people under 18 years old are not allowed to work with this product according to the EU Directive 94/33/EC on the protection of young people at work.

Pregnant women may only work with or be exposed to this product if, based on a risk assessment in the context of the activities and risk management measures taken, the exposure

gwk		
Safety Data Sheet		Revision Date: 18.04.2016
		Print Date: 19.07.2017
ba 6		Version: 2.1

will not lead to any injury for mother and/or child (Maternity Protection Directive 92/85/EC as amended).

Biocides

: N-26223

The components of this product are reported in the following inventories:

TSCA	: On TSCA Inventory
DSL	All components of this product are on the Canadian DSL
AUSTR	On the inventory, or in compliance with the inventory
ENCS	On the inventory, or in compliance with the inventory
KECL	On the inventory, or in compliance with the inventory
PHIL	On the inventory, or in compliance with the inventory
IECSC	On the inventory, or in compliance with the inventory

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECL (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

15.2 Chemical safety assessment

No data available

SECTION 16: Other information

Further information

Revision Date: 18.04.2016

Full text of H-Statements referred to under section 3.

H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H361d	Suspected of damaging the unborn child.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

Further information

Other information : The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the

gwk		
Safety Data Sheet		Revision Date: 18.04.2016
		Print Date: 19.07.2017
ba 6		Version: 2.1

company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

Sources of key data used to compile the Safety Data Sheet

Key literature references and sources of data

SOLENIS Internal data

SOLENIS internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists

BEI : Biological Exposure Index

CAS : Chemical Abstracts Service (Division of the American Chemical Society).

CMR : Carcinogenic, Mutagenic or Toxic for Reproduction

FG : Food grade

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

H-statement : Hazard Statement

IATA : International Air Transport Association.

IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO : International Civil Aviation Organization

ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"

IMDG : International Maritime Code for Dangerous Goods

ISO : International Organization for Standardization

logPow : octanol-water partition coefficient

LCxx : Lethal Concentration, for xx percent of test population

LDxx : Lethal Dose, for xx percent of test population.

ICxx : Inhibitory Concentration for xx of a substance

Ecxx : Effective Concentration of xx

N.O.S.: Not Otherwise Specified

OECD : Organization for Economic Co-operation and Development

OEL : Occupational Exposure Limit

P-Statement : Precautionary Statement

PBT : Persistent , Bioaccumulative and Toxic

PPE : Personal Protective Equipment

STEL : Short-term exposure limit

STOT : Specific Target Organ Toxicity

TLV : Threshold Limit Value

TWA : Time-weighted average

vPvB : Very Persistent and Very Bioaccumulative

WEL : Workplace Exposure Level

ABM : Water Hazard Class for the Netherlands

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

gwk		
Safety Data Sheet		Revision Date: 18.04.2016
		Print Date: 19.07.2017
ba 6		Version: 2.1

ADNR: Regulation for the Carriage of Dangerous Substances on the Rhine
 CLP : Classification, Labelling and Packaging
 CSA : Chemical Safety Assessment
 CSR : Chemical Safety Report
 DNEL : Derived No Effect Level.
 EINECS : European Inventory of Existing Commercial Chemical Substances.
 ELINCS : European List of Notified Chemical Substances
 PEC : Predicted Effect Concentration
 PEL : Permissible Exposure Limits
 PNEC : Predicted No Effect Concentration
 REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals
 RID : Regulation Concerning the International Transport of Dangerous Goods by Rail
 WGK : German Water Hazard Class