

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

**schülke** 

## **grotamar® 82**    *No Change Service!*

Version  
04.01

Revision Date:  
02.05.2016

Date of last issue: 12.05.2014  
Date of first issue: 12.06.2009

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

#### **1.1 Product identifier**

Trade name : grotamar® 82

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

Use of the Sub-  
stance/Mixture : Preservative

#### **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 : SAI/AT +49 40 52100 100 or S&M UK +44 114 254 3500  
sai-at@schuelke.com

#### **1.4 Emergency telephone number**

Emergency telephone num-  
ber : UK Poisons Emergency number: 0870 600 6266  
Emergency telephone num-  
ber : +49 (0)40 / 52 100 -0

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

#### **2.1 Classification of the substance or mixture**

##### **Classification (REGULATION (EC) No 1272/2008)**

Aspiration hazard, Category 1	H304: May be fatal if swallowed and enters air-ways.
Skin corrosion, Category 1C	H314: Causes severe skin burns and eye damage.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Chronic aquatic toxicity, Category 3	H412: Harmful to aquatic life with long lasting effects.

#### **2.2 Label elements**

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

Hazard pictograms :



Signal word : Danger

Hazard statements : H304 May be fatal if swallowed and enters air-ways.  
H314 Causes severe skin burns and eye damage.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

**schülke** 

## **grotamar® 82** *No Change Service!*

Version  
04.01

Revision Date:  
02.05.2016

Date of last issue: 12.05.2014

Date of first issue: 12.06.2009

	H412	Harmful to aquatic life with long lasting effects.
Supplemental Hazard Statements	: EUH066	Repeated exposure may cause skin dryness or cracking.
Precautionary statements	: P260 P280	Do not breathe vapours. Wear protective gloves/ protective clothing/ eye protection/ face protection.
	P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P310	Immediately call a POISON CENTER/doctor.

Hazardous components which must be listed on the label:

66204-44-2	3,3'-Methylenebis[5-methyloxazolidine]
67774-74-7	Benzene, C10-13-alkyl derivatives

### **Additional Labelling:**

EUH208 Contains N,N-bis(2-ethylhexyl)-((1,2,4-triazol-1-yl)methyl)amine. May produce an allergic reaction.

Special labelling of certain mixtures : Contains N,N-bis(2-ethylhexyl)-((1,2,4-triazol-1-yl)methyl)amine. May produce an allergic reaction. 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 : Mixture

#### **Hazardous components**

Chemical name	Index-Number CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
3,3'-Methylenebis[5-methyloxazolidine]	- - - 66204-44-2 266-235-8	Acute Tox. 4; H302 Acute Tox. 4; H332 Skin Corr. 1C; H314	18 - 22

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

**schülke** 

## **grotamar® 82**    **No Change Service!**

Version  
04.01

Revision Date:  
02.05.2016

Date of last issue: 12.05.2014  
Date of first issue: 12.06.2009

Benzene, C10-13-alkyl derivatives	- - - 67774-74-7 267-051-0 01-2119489372-31- XXXX	Asp. Tox. 1; H304	70 - 85
N,N-Bis(2-ethylhexyl)-((1,2,4-triazol-1-yl)methyl)amine	613-072-00-9 91273-04-0 401-280-0	Skin Corr. 1B; H314 Skin Sens. 1; H317 Aquatic Chronic 2; H411	<= 1
2,6-Di-tert-Butylphenol	- - - 128-39-2 204-884-0	Skin Irrit. 2; H315 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	<= 1

For explanation of abbreviations see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- General advice : Take off all contaminated clothing immediately.  
If inhaled : Remove person to fresh air. If signs/symptoms continue, get medical attention.  
In case of skin contact : Wash off immediately with plenty of water.  
In case of eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
If swallowed : Do NOT induce vomiting. Rinse mouth with water. Give small amounts of water to drink. Obtain medical attention.

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

- Symptoms : No information available.,  
Risks : No information available.

### 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 : Dry powder, Foam, Carbon dioxide (CO<sub>2</sub>), Water  
Unsuitable extinguishing media : No information available.

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

- Specific hazards during fire-fighting : No information available.  
Specific risk from the substance or the product itself, its combustion products or evolved gases : Decomposition products, see chapter 10

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

**schülke** 

## **grotamar® 82**    *No Change Service!*

Version  
04.01

Revision Date:  
02.05.2016

Date of last issue: 12.05.2014  
Date of first issue: 12.06.2009

### **5.3 Advice for firefighters**

Further information : Standard procedure for chemical fires.

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

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

Personal precautions : Ensure adequate ventilation. Use personal protective equipment.

### **6.2 Environmental precautions**

Environmental precautions : Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

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

Methods for cleaning up : Wipe up with absorbent material (e.g. cloth, fleece). Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

### **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 : Use only in well-ventilated areas. Handle and open container with care.  
Advice on protection against fire and explosion : No special protective measures against fire required.  
Hygiene measures : Take off all contaminated clothing immediately.

### **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 : Limited stability - see label on pack.  
Advice on common storage : Keep away from food and drink.

### **7.3 Specific end use(s)**

Specific use(s) : none

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

### **8.1 Control parameters**

#### **Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Formaldehyde	50-00-0	Permissible exposure limit	0,3 ppm 0,37 mg/m <sup>3</sup>	TRGS 900
		Ceiling Limit Value	0,6 ppm 0,74 mg/m <sup>3</sup>	TRGS 900
		Permissible exposure limit	0,75 ppm	OSHA
		Short term expo-	2 ppm	OSHA

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

**schülke** 

## **grotamar® 82** No Change Service!

Version  
04.01

Revision Date:  
02.05.2016

Date of last issue: 12.05.2014  
Date of first issue: 12.06.2009

sure limit

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

Substance name	End Use	Exposure routes	Potential health effects	Value
Benzene, C10-13-alkyl derivatives	Workers	Skin contact	Systemic effects, Long-term exposure	9,6 mg/kg
	Workers	Inhalation	Systemic effects, Long-term exposure	7 mg/m <sup>3</sup>
	Workers	Inhalation	Local effects, Long-term exposure	7 mg/m <sup>3</sup>
	Consumers	Skin contact	Systemic effects, Long-term exposure	4,8 mg/kg
	Consumers	Inhalation	Systemic effects, Long-term exposure	1,8 mg/m <sup>3</sup>
	Consumers	Ingestion	Systemic effects, Long-term exposure	0,5 mg/kg
	Consumers	Inhalation	Local effects, Long-term exposure	1,8 mg/m <sup>3</sup>

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

Substance name	Environmental Compartment	Value
Benzene, C10-13-alkyl derivatives	Fresh water	0,000075 mg/l
	Marine water	0,0075 µg/l
	Fresh water sediment	0,143 mg/kg
	Marine sediment	0,143 mg/kg
	Intermittent use/release	0,0001 mg/l
	Sewage treatment plant	14,2 mg/l

## 8.2 Exposure controls

### Personal protective equipment

- Eye protection : Safety glasses with side-shields conforming to EN166
- Hand protection : Impervious gloves  
Splash protection: disposable nitrile rubber gloves e.g. Dermatril (layer thickness: 0,11 mm) made by KCL or gloves from other manufacturers offering the same protection. Prolonged contact: 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.
- Skin and body protection : Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit ( according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).
- Respiratory protection : When workers are facing concentrations above the exposure

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

**schülke** 

## **grotamar® 82**    *No Change Service!*

Version  
04.01

Revision Date:  
02.05.2016

Date of last issue: 12.05.2014  
Date of first issue: 12.06.2009

	limit they must use appropriate certified respirators.
Filter type	: Filter type AB
Protective measures	: Avoid contact with skin and eyes.

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

### **9.1 Information on basic physical and chemical properties**

Appearance	: Liquid
Colour	: colourless, -, light yellow
Odour	: amine-like
Odour Threshold	: not determined
Freezing point	: < -18 °C
Boiling point/boiling range	: > 200 °C, Directive 92/69/EEC, A.2
Flash point	: > 100 °C, ISO 2719
Evaporation rate	: not determined
Flammability (solid, gas)	: Not applicable
Upper explosion limit	: not determined
Lower explosion limit	: not determined
Vapour pressure	: not determined
vapour density	: not determined
Density	: 0,884 - 0,895 g/cm <sup>3</sup> , 20 °C, Tested according to Directive 92/69/EEC.
Partition coefficient: n-octanol/water	: Not applicable
Auto-ignition temperature	: not determined
Viscosity	
Viscosity, dynamic	: 7 mPa*s, 20 °C, Rheo WIN RS 600
Flow time	: < 15 s at 20 °C, DIN 53211
Explosive properties	: Not explosive
Oxidizing properties	: The substance or mixture is not classified as oxidizing.

### **9.2 Other information**

Surface tension	: ca. 27 mN/m
Refractive index	: 1,474 - 1,486

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

### **10.1 Reactivity**

Stable under recommended storage conditions.

### **10.2 Chemical stability**

No decomposition if stored normally.

### **10.3 Possibility of hazardous reactions**

reaction with acids

### **10.4 Conditions to avoid**

Protect from frost, heat and sunlight.

### **10.5 Incompatible materials**

No data available,

### **10.6 Hazardous decomposition products**

formaldehyde

**grotamar® 82** *No Change Service!*Version  
04.01Revision Date:  
02.05.2016Date of last issue: 12.05.2014  
Date of first issue: 12.06.2009**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Acute toxicity****Components:****3,3'-Methylenebis[5-methyloxazolidine]:**

- Acute oral toxicity : LD50 (Rat): 900 mg/kg  
Acute inhalation toxicity : LC50 (Rat): 2 mg/l, 4 h, dust/mist, OECD Test Guideline 436, GLP: yes  
Acute dermal toxicity : LD50 (Rat): 1207 - 1620 mg/kg, OECD Test Guideline 402, not applicable, corrosive substance. According Guideline OECD 402 a non- corrosive concentration has to be tested

**Benzene, C10-13-alkyl derivatives:**

- Acute oral toxicity : LD50 (Rat): > 2000 mg/kg  
Acute dermal toxicity : LD50 (Rat): > 2000 mg/kg, OECD Test Guideline 402

**N,N-Bis(2-ethylhexyl)-((1,2,4-triazol-1-yl)methyl)amine:**

- Acute oral toxicity : LD50 Oral (Rat): > 2000 mg/kg, OECD Test Guideline 401

**2,6-Di-tert-Butylphenol:**

- Acute oral toxicity : LD50 Oral (Rat): > 5000 mg/kg  
Acute dermal toxicity : LD50 (Rabbit): > 10000 mg/kg

**Skin corrosion/irritation****Components:****3,3'-Methylenebis[5-methyloxazolidine]:**

Rabbit, Severe skin irritation, concentrate

**Benzene, C10-13-alkyl derivatives:**

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

**Serious eye damage/eye irritation****Components:****3,3'-Methylenebis[5-methyloxazolidine]:**

Rabbit, Risk of serious damage to eyes., concentrate

**Benzene, C10-13-alkyl derivatives:**

Rabbit, No eye irritation

**Respiratory or skin sensitisation****Components:****3,3'-Methylenebis[5-methyloxazolidine]:**

Did not cause sensitisation on laboratory animals. Guinea pig, OECD Test Guideline 406

**Benzene, C10-13-alkyl derivatives:**

Did not cause sensitisation on laboratory animals. Maximisation Test, Guinea pig, OECD Test Guideline 406

**Germ cell mutagenicity****Components:****3,3'-Methylenebis[5-methyloxazolidine]:**

- Genotoxicity in vitro : OECD Test Guideline 471, Not mutagenic in Ames Test  
Genotoxicity in vivo : Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis), Mouse, OECD Test Guideline

**grotamar® 82** *No Change Service!*Version  
04.01Revision Date:  
02.05.2016Date of last issue: 12.05.2014  
Date of first issue: 12.06.2009

475, Did not show mutagenic effects in animal experiments.

**Benzene, C10-13-alkyl derivatives:**

Genotoxicity in vitro : Did not show mutagenic effects in animal experiments.

**Reproductive toxicity****Components:****Benzene, C10-13-alkyl derivatives:**

Effects on fertility : Rat, Oral, NOAEL: 50 mg/kg, F1: 50 mg/kg, F2: 50 mg/kg, , OECD Test Guideline 416, Based on available data, the classification criteria are not met.

Effects on foetal development : Rat, Oral, NOAEL: 125 mg/kg, Based on available data, the classification criteria are not met.

**STOT - single exposure**

No data available

**STOT - repeated exposure**

No data available

**Repeated dose toxicity****Components:****3,3'-Methylenebis[5-methyloxazolidine]:**

Rat, NOAEL: 72 mg/kg, Repeated dose (90 days) toxicity (oral), OECD Test Guideline 408

**Benzene, C10-13-alkyl derivatives:**

Rat, LOAEL: 125 mg/kg, Oral, 28 d, OECD Test Guideline 407

**Aspiration toxicity****Components:****Benzene, C10-13-alkyl derivatives:**

May be fatal if swallowed and enters airways.

**SECTION 12: Ecological information****12.1 Toxicity****Components:****3,3'-Methylenebis[5-methyloxazolidine]:**

Toxicity to fish : LC50 (Brachidanio rerio): 57,7 mg/l

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna): 37,9 mg/l, 48 h

Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): 5,7 mg/l, 72 h

Toxicity to bacteria : EC50 : 44 mg/l , OECD Test Guideline 209

**Benzene, C10-13-alkyl derivatives:**

Toxicity to fish : (Danio rerio (zebra fish)): , 14 h, semi-static test, Aquatic toxicity is unlikely due to low solubility.

Toxicity to daphnia and other aquatic invertebrates : (Daphnia magna (Water flea)): , 48 h, Aquatic toxicity is unlikely due to low solubility.

Toxicity to algae : (Scenedesmus capricornutum (fresh water algae)): , 72 h, Aquatic toxicity is unlikely due to low solubility.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: , 21 d, Daphnia magna (Water flea), OECD Test Guideline 211, No toxicity at the limit of solubility

**2,6-Di-tert-Butylphenol:**



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

**schülke** 

## **grotamar® 82**    *No Change Service!*

Version  
04.01

Revision Date:  
02.05.2016

Date of last issue: 12.05.2014

Date of first issue: 12.06.2009

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 13 mg/l, 96 h  
Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 0,45 mg/l, 48 h

### 12.2 Persistence and degradability

#### Product:

Physico-chemical removability : The product is slightly soluble in water. It can be eliminated from water by abiotic processes.

#### Components:

##### **3,3'-Methylenebis[5-methyloxazolidine]:**

Biodegradability : Readily biodegradable, OECD Test Guideline 306

##### **Benzene, C10-13-alkyl derivatives:**

Biodegradability : Readily biodegradable, Biodegradation: > 60 %, Exposure time: 28 d, OECD Test Guideline 301F

##### **2,6-Di-tert-Butylphenol:**

Biodegradability : Not readily biodegradable., Biodegradation: < 50 %, Exposure time: 5 d

### 12.3 Bioaccumulative potential

#### Components:

##### **3,3'-Methylenebis[5-methyloxazolidine]:**

Partition coefficient: n-octanol/water : log Pow: -0,3

##### **Benzene, C10-13-alkyl derivatives:**

Bioaccumulation : Lepomis macrochirus (Bluegill sunfish), 96 d, 0,092 mg/l , Bioconcentration factor (BCF): 35

Partition coefficient: n-octanol/water : log Pow: > 5,0

##### **2,6-Di-tert-Butylphenol:**

Partition coefficient: n-octanol/water : log Pow: 4,5

### 12.4 Mobility in soil

#### Product:

Mobility : No data available

#### Components:

##### **Benzene, C10-13-alkyl derivatives:**

Distribution among environmental compartments : Adsorption/Soil, Koc: 22000, log Koc: 4,34, immobile

### 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:

Adsorbed organic bound halogens (AOX) : Product does not contain any organic halogens.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

**schülke** 

## **grotamar® 82**    *No Change Service!*

Version  
04.01

Revision Date:  
02.05.2016

Date of last issue: 12.05.2014  
Date of first issue: 12.06.2009

---

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

#### **13.1 Waste treatment methods**

- |   |   |   |
|---|---|---|
| Product                                 | : | Dispose of as special waste in compliance with local and national regulations. Can be disposed of as a solid waste or burned in a suitable installation subject to local regulations. |
| Contaminated packaging                  | : | Empty containers should be taken to an approved waste handling site for recycling or disposal.  |
| Waste key for the unused product(Group) | : | The waste producer itself must, in consultation with the appropriate authorities and a waste disposal company, obtain a waste code from the EWC (European Waste Catalogue)            |

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

#### **14.1 UN number**

- |             |   |         |
|-------------|---|---------|
| <b>ADR</b>  | : | UN 3267 |
| <b>IMDG</b> | : | UN 3267 |
| <b>IATA</b> | : | UN 3267 |

#### **14.2 UN proper shipping name**

- |             |   |  |
|-------------|---|--|
| <b>ADR</b>  | : | CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.<br>(3,3'-Methylenebis[5-methyloxazolidine]) |
| <b>IMDG</b> | : | CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.<br>(3,3'-Methylenebis[5-methyloxazolidine]) |
| <b>IATA</b> | : | Corrosive liquid, basic, organic, n.o.s.<br>(3,3'-Methylenebis[5-methyloxazolidine]) |

#### **14.3 Transport hazard class(es)**

- |             |   |   |
|-------------|---|---|
| <b>ADR</b>  | : | 8 |
| <b>IMDG</b> | : | 8 |
| <b>IATA</b> | : | 8 |

#### **14.4 Packing group**

- |                                      |   |           |
|--------------------------------------|---|-----------|
| <b>ADR</b>                           |   |           |
| Packing group                        | : | III       |
| Classification Code                  | : | C7        |
| Labels                               | : | 8         |
| Tunnel restriction code              | : | E         |
| <b>IMDG</b>                          |   |           |
| Packing group                        | : | III       |
| Labels                               | : | 8         |
| EmS Code                             | : | F-A, S-B  |
| <b>IATA</b>                          |   |           |
| Packing instruction (cargo aircraft) | : | 856       |
| Packing group                        | : | III       |
| Labels                               | : | Corrosive |

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

**schülke** 

## **grotamar® 82**    *No Change Service!*

Version  
04.01

Revision Date:  
02.05.2016

Date of last issue: 12.05.2014  
Date of first issue: 12.06.2009

---

### 14.5 Environmental hazards

#### **ADR**

Environmentally hazardous : no

#### **IMDG**

Marine pollutant : no

### 14.6 Special precautions for user

For personal protection see section 8.

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 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

Legislation on the control of major-accident hazards involving dangerous substances : Directive 96/82/EC does not apply

|| Volatile organic compounds : none, Directive 2010/75/EC on the limitation of emissions of volatile organic compounds

### 15.2 Chemical safety assessment

Exempt

## SECTION 16: Other information

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

H302 : Harmful if swallowed.  
H304 : May be fatal if swallowed and enters airways.  
H314 : Causes severe skin burns and eye damage.  
H315 : Causes skin irritation.  
H317 : May cause an allergic skin reaction.  
H332 : Harmful if inhaled.  
H400 : Very toxic to aquatic life.  
H410 : Very toxic to aquatic life with long lasting effects.  
H411 : Toxic to aquatic life with long lasting effects.

#### **Full text of other abbreviations**

Acute Tox. : Acute toxicity  
Aquatic Acute : Acute aquatic toxicity  
Aquatic Chronic : Chronic aquatic toxicity  
Asp. Tox. : Aspiration hazard  
Skin Corr. : Skin corrosion  
Skin Irrit. : Skin irritation  
Skin Sens. : Skin sensitisation

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 Regula-

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

**schülke** 

## **grotamar® 82**     **No Change Service!**

Version  
04.01

Revision Date:  
02.05.2016

Date of last issue: 12.05.2014  
Date of first issue: 12.06.2009

tion; 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; 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**

Changes compared with the previous edition!!!

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.