## 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 Substance/Mixture : Preservative

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

Producer/Supplier : Schülke & Mayr GmbH
Robert-Koch-Str. 2
22851 Norderstedt
Germany
Telephone: +4940521000
Telefax: +494052100318
mail@schuelke.com
www.schuelke.com

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 number : UK Poisons Emergency number: 0870 600 6266

Emergency telephone number : +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 airways. |
| Skin corrosion, Category 1C | H314: Causes severe skin burns and eye damage. |
| Chronic aquatic toxicity, Category 3 | H412: Harmful to aquatic life with long lasting effects. |

**Classification (67/548/EEC, 1999/45/EC)**

| | |
|---|---|
| Corrosive | R34: Causes burns. |
| Harmful | R65: Harmful: may cause lung damage if swallowed.<br>R66: Repeated exposure may cause skin dryness or cracking. |

### 2.2 Label elements

**Labelling**

| | | | |
|---|---|---|---|
| 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. |
| | | H412 | Harmful to aquatic life with long lasting effects. |
| Supplemental Hazard Statements | : | EUH066 | Repeated exposure may cause skin dryness or cracking. |
| Precautionary statements | : | P260 | Do not breathe vapours. |
| | | P280 | 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): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. |
| | | P304+P340 | IF INHALED: Remove victim to fresh air and keep at rest in a position 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 or doctor/ physician. |

**Additional Labelling:**

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

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

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 mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). No special risks known.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Chemical nature : Mixture

**Hazardous components**

| Chemical Name | Index-Number<br>CAS-No.<br>EC-No.<br>Registration number | Classification (67/548/EEC) | Classification (REGULATION (EC) No 1272/2008) | Concentration (%) |
|---|---|---|---|---|
| 3,3′-methylenebis[5-methyloxazolidine] | 66204-44-2<br>266-235-8 | Xn; R20/22<br>C; R34<br>R52 | Acute Tox. 4; H302<br>Acute Tox. 4; H332<br>Skin Corr. 1C; H314 | 18 - 22 % |
| Benzene, C10-13-alkyl derivatives | 67774-74-7<br>267-051-0<br>01-2119489372-31-XXXX | Xn; R65<br>R66 | Asp. Tox. 1; H304 | 70 - 85 % |
| N,N-Bis(2-ethylhexyl)-((1,2,4-triazol-1-yl)methyl)amine | 613-072-00-9<br>91273-04-0<br>401-280-0 | C; R34<br>Xi; R43<br>N; R51/53 | Skin Corr. 1B; H314<br>Skin Sens. 1; H317<br>Aquatic Chronic 2; H411 | <= 1 % |
| 2,6-Di-tert-Butylphenol | 128-39-2<br>204-884-0 | Xi; R38<br>N; R50/53 | Skin Irrit. 2; H315<br>Aquatic Acute 1; H400<br>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 (CO2), 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 |

### 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).<br>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 | WEL | 2 ppm<br>2,5 mg/m3 | HSE |
| Formaldehyde | 50-00-0 | WEL | 2 ppm<br>2,5 mg/m3 | HSE |

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

Benzene, C10-13-alkyl derivatives : End Use: Workers, Exposure routes: Skin contact, Potential health effects: Systemic effects, Long-term exposure, Value: 9,6 mg/kg
End Use: Workers, Exposure routes: Inhalation, Potential health effects: Systemic effects, Long-term exposure, Value: 7 mg/m3
End Use: Workers, Exposure routes: Inhalation, Potential health effects: Local effects, Long-term exposure, Value: 7 mg/m3
End Use: Consumers, Exposure routes: Skin contact, Potential health effects: Systemic effects, Long-term exposure, Value: 4,8 mg/kg
End Use: Consumers, Exposure routes: Inhalation, Potential health effects: Systemic effects, Long-term exposure, Value: 1,8 mg/m3
End Use: Consumers, Exposure routes: Ingestion, Potential health effects: Systemic effects, Long-term exposure, Value: 0,5 mg/kg
End Use: Consumers, Exposure routes: Inhalation, Potential health effects: Local effects, Long-term exposure, Value: 1,8 mg/m3

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

Benzene, C10-13-alkyl derivatives : Fresh water, Value: 0,000075 mg/l

Marine water, Value: 0,0075 µg/l
Fresh water sediment, Value: 0,143 mg/kg
Marine sediment, Value: 0,143 mg/kg

**8.2 Exposure controls**

**Personal protective equipment**

Eye protection : Tightly fitting safety goggles

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.

Protective measures : Avoid contact with skin and eyes.

**Environmental exposure controls**

General advice : Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| Appearance | : | Liquid |
| Colour | : | colourless - light yellow |
| Odour | : | amine-like |
| Flash point | : | > 100 °C, ISO 2719 |
| boiling temperature | : | > 200 °C, Directive 92/69/EEC, A.2 |
| Density | : | 0,884 - 0,895 g/cm3, 20 °C, Directive 92/69/EEC, A.3 |
| Flow time | : | < 15 s at 20 °C, DIN 53211 |

### 9.2 Other information

No data available

## 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

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute toxicity**

**Components:**

**3,3′-methylenebis[5-methyloxazolidine]:**

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

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

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50: > 2000 mg/kg, rat |
| Acute dermal toxicity | : | LD50: > 2000 mg/kg, rat, OECD Test Guideline 402 |

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

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 Oral: > 2000 mg/kg, rat, OECD Test Guideline 401 |

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

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 Oral: > 5000 mg/kg, rat |
| Acute dermal toxicity | : | LD50: > 10000 mg/kg, rabbit |

**Skin corrosion/irritation**

**Components:**

**3,3′-methylenebis[5-methyloxazolidine]:**
Severe skin irritation, rabbit, concentrate

**Benzene, C10-13-alkyl derivatives:**
Moderate irritant, rabbit, Based on available data, the classification criteria are not met.

**Serious eye damage/eye irritation**

**Components:**

**3,3′-methylenebis[5-methyloxazolidine]:**
Risk of serious damage to eyes., rabbit, concentrate

**Benzene, C10-13-alkyl derivatives:**
No eye irritation, rabbit

**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 (GPMT), guinea pig, OECD Test Guideline 406

**Germ cell mutagenicity**

**Components:**

**3,3′-methylenebis[5-methyloxazolidine]:**

| | | |
|---|---|---|
| Genotoxicity in vitro | : | Not mutagenic in Ames Test. OECD 471 |
| Genotoxicity in vivo | : | Did not show mutagenic effects in animal experiments., Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis), mouse, OECD Test Guideline, 475 |

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

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

**Carcinogenicity**
No data available

**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, Exposure time: 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 209 |

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

| | | |
|---|---|---|
| Toxicity to fish | : | 14 h, semi-static test, Aquatic toxicity is unlikely due to low solubility. |
| Toxicity to daphnia and other aquatic invertebrates | : | 48 h, Aquatic toxicity is unlikely due to low solubility. |
| | : | NOEC (Daphnia magna (Water flea)): 21 d, semi-static test, OECD Test Guideline 211, No toxicity at the limit of solubility |
| Toxicity to algae | : | 72 h, Aquatic toxicity is unlikely due to low solubility. |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | NOEC (Daphnia magna (Water flea)): 21 d, No toxicity at the limit of solubility |

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

| | | |
|---|---|---|
| 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 | : | biodegradable OECD 301D / EEC 84/449 C6 |

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

| | | |
|---|---|---|
| Biodegradability | : | Readily biodegradable. > 60 o/o, 28 d, OECD Test Guideline 301F |

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

| | | |
|---|---|---|
| Biodegradability | : | Not readily biodegradable. < 50 o/o, 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 | : | Species: 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 |

### 12.5 Results of PBT and vPvB assessment

**Product**

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

### 12.6 Other adverse effects

**Product**

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

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

| | | |
|---|---|---|
| Product | : | Dispose of as special waste in compliance with local and national regulations.<br>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

| | | |
|---|---|---|
| **ADR** | : | UN 3267 |
| **IMDG** | : | UN 3267 |
| **IATA** | : | UN 3267 |

### 14.2 UN proper shipping name

| | | |
|---|---|---|
| **ADR** | : | CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (3,3′-methylenebis[5-methyloxazolidine]) |
| **IMDG** | : | CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (3,3′-methylenebis[5-methyloxazolidine]) |
| **IATA** | : | Corrosive liquid, basic, organic, n.o.s. (3,3′-methylenebis[5-methyloxazolidine]) |

### 14.3 Transport hazard class(es)

| | | |
|---|---|---|
| **ADR** | : | 8 |
| **IMDG** | : | 8 |
| **IATA** | : | 8 |

### 14.4 Packing group

**ADR**

| | | |
|---|---|---|
| Packing group | : | III |
| Classification Code | : | C7 |
| Labels | : | 8 |
| Tunnel restriction code | : | E |

**IMDG**

| | | |
|---|---|---|
| Packing group | : | III |
| Labels | : | 8 |
| EmS Code | : | F-A, S-B |

**IATA**

| | | |
|---|---|---|
| Packing group | : | III |
| Labels | : | 8 |

### 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 | : | 20 %, Directive 2004/42/EC |

### 15.2 Chemical Safety Assessment

Exempt

## SECTION 16: Other information

**Full text of R-Phrases**

| | | |
|---|---|---|
| R20/22 | : | Harmful by inhalation and if swallowed. |
| R34 | : | Causes burns. |
| R38 | : | Irritating to skin. |
| R43 | : | May cause sensitisation by skin contact. |
| R50/53 | : | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| R51/53 | : | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| R52 | : | Harmful to aquatic organisms. |
| R65 | : | Harmful: may cause lung damage if swallowed. |
| R66 | : | Repeated exposure may cause skin dryness or cracking. |

**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 |

**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.