

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

schülke -+

GrotaMar 71

No Change Service!

Version 04.00

Revision Date 17.02.2008

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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product information

Trade name : GrotaMar 71
Producer/Supplier : Schülke & Mayr GmbH
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22851 Norderstedt
Germany
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www.schuelke.com

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Emergency telephone : +49 (0)40 / 52 100 -0

Application : Preservative

2. HAZARDS IDENTIFICATION

Risk advice to man and the environment

ICAO-Labels / Indication of danger:

C	Corrosive
R21/22	Harmful in contact with skin and if swallowed.
R34	Causes burns.
R52	Harmful to aquatic organisms.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Liquid
(single substance)

CAS-No. : 66204-44-2

EINECS-No. : 266-235-8

Components	CAS-No.	EC-No.	Symbol	R-phrase(s)	Concentration
3,3'-Methylenebis[5-methyloxazolidine]	66204-44-2	266-235-8	C	R21/22, R34, R52	90 - 100 %

For the full text of the R-phrases mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

General advice : Take off all contaminated clothing immediately.
Eye contact : In the case of contact with eyes, rinse immediately with plenty

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- Skin contact : of water and seek medical advice.
Inhalation : Wash off immediately with plenty of water.
Ingestion : If symptoms persist, call a physician.
Ingestion : **Do NOT induce vomiting.** Rinse mouth with water. Give small amounts of water to drink. Obtain medical attention.

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Water, Dry powder, Foam, Carbon dioxide (CO₂)
Extinguishing media which shall not be used for safety reasons : No information available.
Specific risk from the substance or the product itself, its combustion products or evolved gases : Decomposition products, see chapter 10

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : Ensure adequate ventilation. Use personal protective equipment.
Environmental precautions : Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.
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).

7. HANDLING AND STORAGE

Handling

- Safe handling advice : 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.

Storage

- Requirements for storage areas and containers : Store in original container.
Further information : Limited stability - see label on pack
Advice on common storage : Keep away from food and drink.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value	Basis
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Formaldehyde	50-00-0	MAK: 0,37 mg/m ³ MAK: 0,3 ppm	MAK
Formaldehyde	50-00-0	TLV: 0,3 ppm	ACGIH

Hazardous decomposition products

Personal protective equipment

- 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.
- Eye protection : Tightly fitting safety goggles
- Hygiene measures : Take off all contaminated clothing immediately.
- Protective measures : Avoid contact with skin and eyes.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

- Form : Liquid
- Colour : colourless - light yellow
- Odour : amine-like

Other data

- Melting point/range : < -35 °C
Method: Directive 92/69/EEC, A.1
- boiling temperature : ca. 204 °C
Method: Directive 92/69/EEC, A.2
- Flash point : >100 °C
Method: ISO 2719
- Density : 1,049 - 1,069 g/ml at 20 °C
Method: Directive 92/69/EEC, A.3
- Water solubility : at 20 °C
in all proportions
- pH : ca.10 at 1,5 g/l (20 °C)
- Partition coefficient: n-octanol/water : log Pow ca. -0,3 at (25 °C)
Method: Directive 92/69/EEC, A.8
- flow time : <15 s at 20 °C
Method: DIN 53211

10. STABILITY AND REACTIVITY

- Hazardous reactions : reaction with acids.

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Hazardous decomposition : formaldehyde products

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50 rat 900 mg/kg

Acute dermal toxicity : LD50 rat 1207 - 1620 mg/kg
Method: OECD Test Guideline, 402

Skin irritation : rabbit, Severe skin irritation
Test substance: concentrate

Skin irritation : rabbit, No skin irritation
Test substance: 12,5 % solution

Eye irritation : rabbit, Risk of serious damage to eyes.
Test substance: concentrate

Eye irritation : rabbit, No eye irritation
Test substance: 0,2 % solution

Sensitisation : guinea pig, Did not cause sensitization on laboratory animals.
Method: OECD Test Guideline, 406

Repeated dose toxicity : rat
Repeated dose (90 days) toxicity (oral)
NOEL: 72 mg/kg
Method: OECD Test Guideline, 408

Mutagenicity : Not mutagenic in Ames Test.
Method: OECD 471

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

12. ECOLOGICAL INFORMATION

Biodegradability : According to the results of tests of biodegradability this product is considered as being readily biodegradable.
Method: OECD 301D / EEC 84/449 C6

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

Toxicity to algae : EC50 Scenedesmus subspicatus 5,7 mg/l
Testing period: 72 h

Toxicity to daphnia : EC50 Daphnia magna 37,9 mg/l
Testing period: 48 h

Toxicity to bacteria : EC50 44 mg/l

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Method: OECD 209

Chemical Oxygen Demand (COD) : 17887 mg/g
Test substance: 1% solution

AOX : Remarks: Product does not contain any organic halogens.

13. DISPOSAL CONSIDERATIONS

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 transported/delivered using a registered waste carrier for local recycling or waste 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),

14. TRANSPORT INFORMATION

ADR : UN-Number 2735



Class 8
Classification Code C7
Packaging group III
ADR/RID-Labels 8 + 11
ICAO-Labels

Description of the goods Amines, liquid, corrosive, n.o.s. (3,3'-Methylenebis[5-methyloxazolidine])

IMDG : UN-Number 2735



Class 8
EmS F-A, S-B
Packaging group III
Marine pollutant --

Description of the goods AMINES, LIQUID, CORROSIVE, N.O.S. (3,3'-METHYLENEBIS[5-METHYLOXAZOLIDINE])

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IATA : UN-Number 2735




Class 8
Packaging group III
Description of the goods Amines, liquid, corrosive, n.o.s. (3,3'-Methylenebis[5-methyloxazolidine])

15. REGULATORY INFORMATION

Hazardous components:

- 3,3'-Methylenebis[5-methyloxazolidine]

Symbol	:	
		C Corrosive
R-phrase(s)	:	R21/22 Harmful in contact with skin and if swallowed. R34 Causes burns. R52 Harmful to aquatic organisms.
S-phrase(s)	:	S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S35 This material and its container must be disposed of in a safe way. S36/37/39 Wear suitable protective clothing, gloves and eye/face protection. S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.
Special labelling of certain preparations	:	Use biocides safely. Always read the label and product information before use.

National legislation

Legislation on the control of major-accident hazards involving dangerous substances

involving dangerous substances

VOC-Content : 100 %
Directive 2004/42/EC

VOC-Content : none, Switzerland. VOC Ordinance, Annex II (Products)

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Switzerland : Registration number: CHZB0300

16. OTHER INFORMATION

Application : Information on uses can be found in a separate preparation / product brochure.

Text of R-phrases mentioned in Section 3

R21/22 Harmful in contact with skin and if swallowed.

R34 Causes burns.

R52 Harmful to aquatic organisms.

The information given is only of use for possible safety requirements and is based on our actual knowledge. This information does not guarantee any properties. It is the responsibility of the receiver / user of our products to follow existing laws and regulations.

|| Changes compared with the previous edition!!!