

**Safety Data Sheet**  
according to Regulation (EC) No. 1907/2006 (REACH)  
according to Regulation (EU) 2015/830



Article No.: RSM001 grotamar 71  
Print date: 01.10.2019 Revision date: 27.09.2019  
Version: 1.1 Issue date: 27.09.2019

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

1.1. **product identifiers**

Article No. (manufacturer/supplier): RSM001  
Identification of the substance or mixture grotamar 71

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

**Relevant identified uses**

Preservative  
Industrial use

1.3. **Details of the supplier of the safety data sheet**

**supplier (manufacturer/importer/downstream user/distributor)**

Vink Chemicals GmbH & Co. KG

Eichenhöhe 29

D-21255 Kakenstorf

Telephone: +49 (0) 4186 - 88797 0

Telefax: +49 (0) 4186 - 88797 10

**Dept. responsible for information:**

Mr. J. Vink

E-mail (competent person)

support@vink-chemicals.com

1.4. **Emergency telephone number**

Emergency telephone number

National Poisons Information Service

0844 892 0111

**SECTION 2: Hazards identification**

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

**Classification according to Regulation (EC) No 1272/2008 [CLP]**

Acute Tox. 4 / H302

Acute toxicity (oral)

Harmful if swallowed.

Acute Tox. 3 / H311

Acute toxicity (dermal)

Toxic in contact with skin.

Acute Tox. 4 / H332

Acute toxicity (inhalative)

Harmful if inhaled.

Skin Corr. 1B / H314

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Eye Dam. 1 / H318

Serious eye damage/eye irritation

Causes serious eye damage.

Skin Sens. 1A / H317

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Muta. 2 / H341

Germ cell mutagenicity

Suspected of causing genetic defects.

Carc. 1B / H350

Carcinogenicity

May cause cancer.

STOT RE 2 / H373

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aquatic Chronic 2 / H411

Hazardous to the aquatic environment

Toxic to aquatic life with long lasting effects.

2.2. **Label elements**

The product is classified and labelled according to EC directives or corresponding national laws.

**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

**Hazard pictograms**



**Danger**

**Hazard statements**

H302 + H332

Harmful if swallowed or if inhaled.

H311

Toxic in contact with skin.

H314

Causes severe skin burns and eye damage.

H317

May cause an allergic skin reaction.

H341

Suspected of causing genetic defects.

H350

May cause cancer.

H373

May cause damage to organs through prolonged or repeated exposure.

H411

Toxic to aquatic life with long lasting effects.

**Precautionary statements**

P201

Obtain special instructions before use.

P260

Do not breathe vapour.

P273

Avoid release to the environment.

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P280 Wear protective gloves and eye/face protection.  
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P308 + P313 IF exposed or concerned: Get medical advice/attention.  
P310 Immediately call a POISON CENTER or doctor/ physician.  
P391 Collect spillage.

**contains:**

reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2); [MBO]

**Supplemental Hazard information (EU)**

EUH071 Corrosive to the respiratory tract.

2.3. Other hazards

**SECTION 3: Composition / information on ingredients**

3.1. Substances

**Description** Biocide

**Hazardous ingredients**

**Classification according to Regulation (EC) No 1272/2008 [CLP]**

EC No.	REACH No.	Wt %
CAS No.	Chemical name	
INDEX No.	classification: // Remark	
66204-44-2	reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2); [MBO] Acute Tox. 4 H302 / Acute Tox. 3 H311 / Acute Tox. 4 H332 / Skin Corr. 1B H314 / Eye Dam. 1 H318 / Skin Sens. 1A H317 / Muta. 2 H341 / Carc. 1B H350 / STOT RE 2 H373 / Aquatic Chronic 2 H411	50 - 100

**Additional information**

Full text of classification: see section 16

**SECTION 4: First aid measures**

4.1. Description of first aid measures

**General information**

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

**In case of inhalation**

Remove casualty to fresh air and keep warm and at rest. Consult a physician.

**Following skin contact**

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners. Consult a physician.

**After eye contact**

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor.

**After ingestion**

If swallowed, rinse mouth with water (only if the person is conscious). Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Seek medical advice immediately.

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

In all cases of doubt, or when symptoms persist, seek medical advice.

4.3. Indication of any immediate medical attention and special treatment needed

**SECTION 5: Firefighting measures**

5.1. Extinguishing media

**Suitable extinguishing media:**

alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

**Extinguishing media which must not be used for safety reasons:**

strong water jet

5.2. **Special hazards arising from the substance or mixture**

Do not breathe gas/fumes/vapour/spray. Inhaling hazardous decomposing products can cause serious health damage.

5.3. **Advice for firefighters**

Provide a conveniently located respiratory protective device.

**Additional information**

Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways.

**SECTION 6: Accidental release measures**

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

Ventilate affected area. Do not breathe vapours. See protective measures under point 7 and 8.

6.2. **Environmental precautions**

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

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

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13). Clean using cleansing agents. Do not use solvents.

6.4. **Reference to other sections**

Observe protective provisions (see section 7 and 8).

**SECTION 7: Handling and storage**

7.1. **Precautions for safe handling**

**Advices on safe handling**

Keep out of the reach of children. Do not get in eyes, on skin, or on clothing. Do not breathe dust or spray mist. Avoid long-term and repeated skin contact. Do not taste or swallow. Thorough skin-cleansing after handling the product. Store in a well-ventilated place. Keep container tightly closed. Use only with sufficient ventilation. Refer to chapter 8. : Exposure controls / Personal protection

**Precautions against fire and explosion:**

Respiratory protection necessary at: aerosol or mist formation

7.2. **Conditions for safe storage, including any incompatibilities**

**Technical measures and storage conditions**

Keep/Store only in original container.

**Requirements for storage rooms and vessels**

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO).

**Further information on storage conditions**

Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 15 °C and 30 °C. Protect from heat and direct sunlight. Keep container tightly closed. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

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

Observe technical data sheet.

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

8.1. **Control parameters**

**Occupational exposure limit values**

not applicable

8.2. **Exposure controls**

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

**Occupational exposure controls**

**Respiratory protection**

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Respiratory protection necessary at: aerosol or mist formation Use only respiratory protection equipment with CE-symbol including four digit test number. Combination filtering device (EN 14387) Filter type: ABEK

**Hand protection**

Wear protective gloves. Suitable material: Nitrile, Butyl caoutchouc (butyl rubber). Recommended glove articles EN ISO 374

**Eye protection**

Wear eye glasses with side protection according to EN 166.

**Protective clothing**

Suitable protective clothing: Protective clothing. type 6 DIN EN 13034

**Protective measures**

Avoid contact with eyes and skin. Do not breathe aerosol. After contact clean skin thoroughly with water and soap or use appropriate cleanser.

**Environmental exposure controls**

Do not allow to enter into surface water or drains. See chapter 7. No additional measures necessary.

**SECTION 9: Physical and chemical properties**

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

**Appearance:**

**Physical state:** Liquid  
**Appearance:** Liquid  
**Colour:** light yellow

**Odour:** characteristic

**Odour threshold:** not applicable

**pH at 20 °C::** 10

**Initial boiling point and boiling range:** 204 °C

**Flash point:** > 100 °C

**Evaporation rate:** not determined

**Flammability (solid, gas):**

**Burning time (s):** not determined

**Upper/lower flammability or explosive limits:**

**Lower explosion limit:** not applicable

**Upper explosion limit:** not applicable

**Vapour pressure at 20 °C::** 0,014 mbar

**Vapour density:** not determined

**Relative density:**

**Density at 20 °C::** 1,061 g/cm<sup>3</sup>

**Solubility(ies):**

**Water solubility (g/L) at 20 °C::** 999

**Partition coefficient: n-octanol/water:** see section 12

**Auto-ignition temperature:** not determined

**Decomposition temperature:** not determined

**Explosive properties:** not applicable

**Oxidising properties:** not applicable

9.2. **Other information**

**SECTION 10: Stability and reactivity**

10.1. **Reactivity**

10.2. **Chemical stability**

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.3. **Possibility of hazardous reactions**

No known hazardous reactions.

10.4. **Conditions to avoid**

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Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7. Hazardous decomposition byproducts may form with exposure to high temperatures.

**10.5. Incompatible materials**

**10.6. Hazardous decomposition products**

Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides.

**SECTION 11: Toxicological information**

Classification according to Regulation (EC) No 1272/2008 [CLP]  
No data on preparation itself available.

**11.1. Information on toxicological effects**

**Acute toxicity**

Harmful if swallowed.

Toxic in contact with skin.

Harmful if inhaled.

reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2); [MBO]

oral, LD50, Rat: 632 mg/kg

dermal, LD50, Rat 760 - 6000 mg/kg

Method: OECD 402

inhalative (dust and mist), LC50, Rat: 2 mg/l (4 h)

Method: OECD 436

**skin corrosion/irritation; Serious eye damage/eye irritation**

Corrosive

Causes severe skin burns and eye damage.

**Respiratory or skin sensitisation**

sensitising

May cause an allergic skin reaction.

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

Suspected of causing genetic defects.

May cause cancer.

**Specific target organ toxicity**

May cause damage to organs through prolonged or repeated exposure.

**Aspiration hazard**

Toxicological data are not available.

**Practical experience/human evidence**

Other observations:

**Overall Assessment on CMR properties**

EC No. CAS No.	Chemical name	Classification according to Regulation (EC) No 1272/2008 [CLP]
66204-44-2	reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2); [MBO]	Carc. 1B

**Remark**

There is no information available on the preparation itself .

**SECTION 12: Ecological information**

**overall evaluation**

Classification according to Regulation (EC) No 1272/2008 [CLP]

**12.1. Toxicity**

reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2); [MBO]

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Fish toxicity, LC50, Brachydanio rerio (zebra-fish): 71 mg/l (96 h)  
Daphnia toxicity, EC50, Daphnia pulex (water flea): 28 mg/l (48 h)  
Algae toxicity, ErC50, Pseudokirchneriella subcapitata: 2,95 mg/l (72 h)

**Long-term Ecotoxicity**

Toxic to aquatic life with long lasting effects.

**12.2. Persistence and degradability**

reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2); [MBO]  
: 89,8 (28 day(s)); evaluation Readily biodegradable (according to OECD criteria)  
Method: OECD 306

**12.3. Bioaccumulative potential**

reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2); [MBO]  
Partition coefficient: n-octanol/water: -0,3

**Bioconcentration factor (BCF)**

Toxicological data are not available.

**12.4. Mobility in soil**

Toxicological data are not available.

**12.5. Results of PBT and vPvB assessment**

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

**12.6. Other adverse effects**

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Appropriate disposal / Product Recommendation**

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way.

**List of proposed waste codes/waste designations in accordance with EWC**

140603\* other solvents and solvent mixtures

**packaging Recommendation**

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

**SECTION 14: Transport information**

**14.1. UN number**

UN 2922

**14.2. UN proper shipping name**

Land transport (ADR/RID):

Corrosive liquid, toxic, n.o.s.

Sea transport (IMDG):

((3,3-methylenebis(5-methyloxazolidine))) solution

CORROSIVE LIQUID, TOXIC, N.O.S.

Air transport (ICAO-TI / IATA-DGR):

((3,3-methylenebis(5-methyloxazolidine))) SOLUTION

Corrosive liquid, toxic, n.o.s.

((3,3-methylenebis(5-methyloxazolidine))) solution

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

8 (6.1)

**14.4. Packing group**

II

**14.5. Environmental hazards**

Land transport (ADR/RID)

UMWELTGEFÄHRDEND

Marine pollutant

p / (3,3-methylenebis(5-methyloxazolidine))

**14.6. Special precautions for user**

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.

Advices on safe handling: see parts 6 - 8

**Further information**

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**Land transport (ADR/RID)**

tunnel restriction code E

**Sea transport (IMDG)**

EmS-No. F-A, S-B  
in packages <= 5 litres not restricted 2.10.2.7

**Air transport (ICAO-TI / IATA-DGR)**

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

not applicable

**SECTION 15: Regulatory information**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture** \*

**EU legislation**

Restrictions of occupation:

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.  
Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

**Directive 2010/75/EU on industrial emissions**

VOC-value (in g/L): 1061

**National regulations**

**15.2. Chemical Safety Assessment**

For this substance a chemical safety assessment has not been carried out.

**SECTION 16: Other information**

**Full text of classification in section 3:**

Acute Tox. 4 / H302	Acute toxicity (oral)	Harmful if swallowed.
Acute Tox. 3 / H311	Acute toxicity (dermal)	Toxic in contact with skin.
Acute Tox. 4 / H332	Acute toxicity (inhalative)	Harmful if inhaled.
Skin Corr. 1B / H314	Skin corrosion/irritation	Causes severe skin burns and eye damage.
Eye Dam. 1 / H318	Serious eye damage/eye irritation	Causes serious eye damage.
Skin Sens. 1A / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.
Muta. 2 / H341	Germ cell mutagenicity	Suspected of causing genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
Carc. 1B / H350	Carcinogenicity	May cause cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
STOT RE 2 / H373	STOT-repeated exposure	May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
Aquatic Chronic 2 / H411	Hazardous to the aquatic environment	Toxic to aquatic life with long lasting effects.

**Further information**

Classification according to Regulation (EC) No 1272/2008 [CLP]

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in chapter 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.

\* Data changed compared with the previous version