

**Safety data sheet  
according to 1907/2006/EC, Article 31**

Printing date 19.05.2015

Version 5

Revision: 19.05.2015

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

- **1.1 Product identifier**
- **Trade name: GUM-M**

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- **Article number:** 10096, 08096, 09096
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture**  
Printing and reproduction of recorded media  
Gum solution for printing plates  
Reserved for industrial and professional use.
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
ADEFO-CHEMIE GmbH  
Justus-von-Liebig-Str. 24-26  
D-63128 Dietzenbach  
Tel.: +49 6074 84239-0  
Fax: +49 6074 84239-63  
E-Mail: service@adefo-chemie.de  
www.adefo-chemie.de
- **Informing department:**  
Tel.: +49 6074 84239-0  
Fax: +49 6074 84239-63  
E-Mail: kr@calbe-chemie.de
- **1.4 Emergency telephone number:** Tel.: 0700-24112112 (CAL)

**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**  
Skin Sens. 1 H317 May cause an allergic skin reaction.

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- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard statements**  
H317 May cause an allergic skin reaction.
- **Precautionary statements**  
P280 Wear protective gloves.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P302+P352 IF ON SKIN: Wash with plenty of water.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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**SECTION 3: Composition/information on ingredients****3.2 Mixtures****Description:** Mixture of the substances listed below with harmless additions.**Dangerous components:**

CAS: 10043-35-3 EINECS: 233-139-2 Index number: 005-007-00-2 Reg.nr.: 01-2119486683-25-xxxx	boric acid Repr. 1B, H360FD	1-2%
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**SVHC**

10043-35-3 | boric acid

**Additional information** For the wording of the listed risk phrases refer to section 16.**SECTION 4: First aid measures****4.1 Description of first aid measures****General information**

Personal protection for the First Aider.

Wear protective clothing.

Instantly remove any clothing soiled by the product.

**After inhalation** No special measures required.**After skin contact**

Instantly wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

**After eye contact**

Rinse opened eye for several minutes under running water (&gt; 15 min). Then consult doctor.

**After swallowing** Rinse out mouth and then drink plenty of water.**4.2 Most important symptoms and effects, both acute and delayed**

No known symptoms to date.

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

No further relevant information available.

**SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing agents**CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

Use fire fighting measures that suit the environment.

**For safety reasons unsuitable extinguishing agents** None**5.2 Special hazards arising from the substance or mixture**

Can be released in case of fire

Carbon monoxide

**5.3 Advice for firefighters****Protective equipment:**

Do not inhale explosion gases or combustion gases.

At formation of toxic gases:

Put on breathing apparatus.

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### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:**  
Dilute with much water.  
Do not allow to enter drainage system, surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose of contaminated material as waste according to item 13.
- **6.4 Reference to other sections**  
See Section 8 for information on personal protection equipment.  
See Section 13 for information on disposal.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special precautions necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:**  
Keep container tightly closed in a cool, well-ventilated place.
- **Information about storage in one common storage facility:**  
Keep away from foodstuffs, beverages and food.
- **Further information about storage conditions:**  
Keep container tightly sealed.  
Protect from frost.
- **Recommended storage temperature:** 5-25 °C
- **Storage class**  
LGK 12  
(German Technical Rule for Hazardous Substance – TRGS 510)
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **8.1 Control parameters**

- **Components with limit values that require monitoring at the workplace:**

9005-25-8 Starch

WEL	Long-term value: 10* 4** mg/m <sup>3</sup> *total inhalable **respirable
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- **Additional information:** The lists that were valid during the compilation were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**  
The usual precautionary measures should be adhered to general rules for handling chemicals.
- **Breathing equipment:** Not required.
- **Protection of hands:**  
Protective gloves.

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The protective gloves to be used must comply with the specifications of the EC directive 89/686/EEC and the resultant standard EN 374.

This recommendation applies only to the product stated in the Safety Data Sheet and supplied by us as well as to the purpose specified by us.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

	Thickness (mm)	Breakthrough time (min)
Nitril rubber	0,38	> 480
Neoprene	0,65	> 240
Butyl rubber	0,36	> 480

Avoid natural rubber gloves.

- **Penetration time of glove material**

Value for permeation: Level  $\leq$  6 (480 min)

The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

- **As protection from splashes gloves made of the following materials are suitable:**

Synthetic gloves

Value for permeation: Level:

$\geq$  3 (60 min)

- **Eye protection:** Safety glasses

- **Body protection:** Light weight protective clothing

### SECTION 9: Physical and chemical properties

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

- **General Information**

- **Appearance:**

<b>Form:</b>	Fluid
<b>Colour:</b>	Yellow
	Clear
• <b>Odour:</b>	Odourless

• **pH-value at 25 °C:** 4.9

- **Change in condition**

**Melting point/Melting range:** < 0 °C

**Boiling point/Boiling range:** > 100 °C

• **Flash point:** > 100 °C

• **Self-inflammability:** Product is not selfigniting.

• **Danger of explosion:** Product is not explosive.

- **Critical values for explosion:**

**Oxidising properties** None

• **Density at 20 °C** 1.04 g/cm<sup>3</sup>

- **Solubility in / Miscibility with**

**Water:** miscible

- **Viscosity:**

**dynamic:** Not determined

**kinematic:** Not determined

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- **Solvent content:**
- Organic solvents:** 0 %
- **9.2 Other information** No further relevant information available.

### SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** None
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**

- **LD/LC50 values that are relevant for classification:**

**55965-84-9 a mixture of: 5-chloro-2-methyl-2 H -isothiazol-3-one [EC No 247-500-7] and 2-methyl-2 H -isothiazol-3-one [EC No 220-239-6] (3:1)**

Oral	LD50	3310 mg/kg (rat)
Dermal	LD50	> 5000 mg/kg (rabbit)

**10043-35-3 boric acid**

Oral	LD50	2660 mg/kg (rat)
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- **Primary irritant effect:**
- **Skin corrosion/irritation** No irritant effect.
- **Serious eye damage/irritation** No irritant effect.
- **Respiratory or skin sensitisation** Sensitization possible by skin contact.
- **Additional toxicological information:**  
At present there are no animal experimental data.  
This statement was deduced from the properties of the single components.

### SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

**55965-84-9 a mixture of: 5-chloro-2-methyl-2 H -isothiazol-3-one [EC No 247-500-7] and 2-methyl-2 H -isothiazol-3-one [EC No 220-239-6] (3:1)**

EC50/48 h	0.16 mg/l (Daphnia magna)
EC50/72 h	0.018 (Selenastrum capricornutum)
	0.003 (Skeletonema costatum)
LC50/96 h	0.28 mg/l (Lepomis macrochirus)
	0.3 mg/l (Leuciscus idus)
	0.19 mg/l (Onchrohynchus mykiss)

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**10043-35-3 boric acid**

EC50/48 h	133 mg/l (Daphnia magna)
LC50/96 h	50 - 100 mg/l (Onchrohynchus mykiss)

- **12.2 Persistence and degradability** Not determined
- **12.3 Bioaccumulative potential** Not determined
- **Behaviour in environmental systems:** Not determined
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:** No further relevant information available.
- **Behaviour in sewage processing plants:** Not determined
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): Weakly water-endangering.  
At present there are no ecotoxicological assessments.  
This statement was deduced from the properties of the single components.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

**SECTION 13: Disposal considerations**

- **13.1 Waste treatment methods**
- **Recommendation**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.  
Must be specially treated under adherence to official regulations.

- **European waste catalogue**

08 04 99	wastes not otherwise specified
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- **Uncleaned packagings:**
- **Recommendation:**  
Non contaminated packagings can be used for recycling.  
Packagings that cannot be cleaned are to be disposed of in the same manner as the product.  
EAK-No. 15 01 10
- **Recommended cleaning agent:** Water, if necessary with cleaning agent.

**SECTION 14: Transport information**

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|--|------|
| · <b>14.1 UN-Number</b>                  |      |
| · <b>ADR, ADN, IMDG, IATA</b>            | Void |
| · <b>14.2 UN proper shipping name</b>    |      |
| · <b>ADR</b>                             | Void |
| · <b>ADN, IMDG, IATA</b>                 | Void |
| · <b>14.3 Transport hazard class(es)</b> |      |
| · <b>ADR, ADN, IMDG, IATA</b>            |      |
| · <b>Class</b>                           | Void |
| · <b>14.4 Packing group</b>              |      |
| · <b>ADR, IMDG, IATA</b>                 | Void |

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|---|--|
| · <b>14.5 Environmental hazards:</b>  | Not applicable.                                      |
| · <b>14.6 Special precautions for user</b>  | Not applicable.                                      |
| · <b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable.                                      |
| · <b>Transport/Additional information:</b>  | Not dangerous according to the above specifications. |
| · <b>UN "Model Regulation":</b>   | -  |

**SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **National regulations**

Class	Share in %
NK	0.2

- **Water hazard class:** Water hazard class 1 (Self-assessment): weakly water-endangering.
- **Other regulations, limitations and prohibitive regulations**

· **Substances of very high concern (SVHC) according to REACH, Article 57**

10043-35-3	boric acid
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- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**SECTION 16: Other information**

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**  
H360FD May damage fertility. May damage the unborn child.
- **Recommended restriction of use** No public product, only for commercial use
- **Abbreviations and acronyms:**  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1  
Repr. 1B: Reproductive toxicity, Hazard Category 1B
- **Sources**  
applicable EEC directives:
  - 1907/2006
  - 1272/2008

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Internal physical tests, MSDS of the ingredients,  
Information system on hazardous substances of the German Social Accident Insurance  
(GESTIS-database on hazardous substances), <http://www.dguv.de/ifa/en/gestis/stoffdb/index.jsp>

· \* **Data compared to the previous version altered.**

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