

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

Printing date 12.10.2016

Version number 44

Revision: 12.10.2016

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

- **1.1 Product identifier**
- **Product name:** Alkalinity M
- **Catalog number:** 00511309, 511300, 511301, 511303, 501531
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation:** Reagent for water analysis
- **1.3 Details of the supplier of the safety data sheet**
- **Supplier:**
Tintometer GmbH
Schleefstr. 8-12
DE-44287 Dortmund
Made in Germany
www.lovibond.com
- **Informing department:**
e-mail: produktsicherheit@tintometer.de
Product Safety Department
- **Contact for technical details:**
Technical Department
e-mail: technik@tintometer.de
- **1.4 Emergency telephone number:**
Poison Center Berlin, Germany
phone: 0049-30 30686 790
Languages: English and German

phone: +49 (0) 231 945100
E-Mail: sales@tintometer.de

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.

- **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-determining components of labelling:**
sulphanilic acid
- **Hazard statements**
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
- **Precautionary statements**
P261 Avoid breathing dust.
P280 Wear protective gloves / eye protection.

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P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

- **2.3 Other hazards** No further relevant information available.

- **Results of PBT and vPvB assessment**

This mixture does not contain any substances that are assessed to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB), according to the criteria given in Annex XIII of Regulation (EC) No. 1907/2006.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**

- **Description:** Preparation contains organic compounds.

- **Dangerous components:**

| | | | |
|------------------------|------------------|---|--------|
| CAS: 121-57-3 | sulphanilic acid | ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317 | 10-20% |
| EINECS: 204-482-5 | | | |
| Index No: 612-014-00-X | | | |

- **Additional information** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**

- **General information** Instantly remove any clothing soiled by the product.

- **After inhalation** Supply fresh air; consult doctor in case of symptoms.

- **After skin contact**

Instantly rinse with water.

If skin irritation continues, consult a doctor.

If skin irritation or rash occurs: Get medical advice/attention.

- **After eye contact** Rinse opened eye for several minutes (at least 15 min) under running water. Then consult doctor.

- **After swallowing**

Rinse out mouth and then drink 1-2 glasses of water.

Seek medical treatment in case of complaints.

- **4.2 Most important symptoms and effects, both acute and delayed:**

headache

cramps

cyanosis

methaemoglobinaemia

allergic reactions

drop in blood pressure

- **Danger** risk of skin sensitization

- **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** Water, Carbon dioxide (CO₂), Foam, Fire-extinguishing powder

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

combustible

Formation of toxic gases is possible during heating or in case of fire.

Can be released in case of fire:

nitrous gases

Sulphur oxides (SO_x)

nitrogen oxides (NO_x)

carbon monoxide (CO) and carbon dioxide (CO₂)

- **5.3 Advice for firefighters**

- **Protective equipment:**

Wear self-contained breathing apparatus.

Wear full protective suit.

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- Collect contaminated fire fighting water separately. It must not enter drains.
- Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
- Ambient fire may liberate hazardous vapours.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Wear protective equipment. Keep unprotected persons away.
- Keep away from ignition sources

Advice for non-emergency personnel:

- Wear protective equipment. Keep unprotected persons away.
- Ensure adequate ventilation
- Keep away from ignition sources

Advice for emergency responders: Protective equipment: see section 8

6.2 Environmental precautions: Do not allow product to reach sewage system or water bodies.

6.3 Methods and material for containment and cleaning up:

- Ensure adequate ventilation.
- Collect mechanically.
- Dispose of contaminated material as waste according to item 13.

6.4 Reference to other sections

- See Section 7 for information on safe handling
- 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 measures required.

Advice on safe handling: Prevent formation of dust.

Hygiene measures:

- Avoid contact with the skin.
- Avoid contact with the eyes.
- Remove/Take off immediately all contaminated clothing.
- Wash hands during breaks and at the end of the work.
- Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities
Storage

- Requirements to be met by storerooms and containers:** Store in cool location.
- Information about storage in one common storage facility:** Store away from oxidising agents.
- Further information about storage conditions:**
 - Store in cool, dry conditions in well sealed containers.
 - Protect from heat and direct sunlight.
 - Protect from the effects of light.
 - Store under dry conditions.
 - Protect from humidity and keep away from water.
 - This product is hygroscopic.

Recommended storage temperature: 20 °C +/- 5 °C

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Components with limit values that require monitoring at the workplace:
CAS: 9004-34-6 cellulose

| | |
|---------------------|---|
| WEL (Great Britain) | Short-term value: 20* mg/m ³ Long-term value: 10* 4** mg/m ³ *inhalable dust **respirable |
|---------------------|---|

Regulatory information WEL (Great Britain): EH40/2011

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Recommended monitoring procedures:

Methods for measurement of the workplace atmosphere have to correspond to the requirements of norms DIN EN 482 and DIN EN 689.

• **Additional information:** The lists that were valid during the compilation were used as basis.

8.2 Exposure controls
Engineering measures:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See item 7.

Personal protective equipment

• **Breathing equipment:** Use breathing protection against the effects of fumes/dust/aerosol.

Protection of hands:

Protective gloves.

Preventive skin protection by use of skin-protecting agents is recommended.

After use of gloves apply skin-cleaning agents and skin cosmetics.

Material of gloves

nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm

Penetration time of glove material

Value for the permeation: Level = 1 (< 10 min)

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• **Eye protection:** Safety glasses

• **Body protection:** Protective work clothing.

• **Limitation and supervision of exposure into the environment:** Do not allow product to reach sewage system or water bodies.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
Appearance:

| | |
|-------------------------------|-----------|
| Form / Physical state: | Tablets |
| Colour: | Light red |

| | |
|---------------------------|----------------|
| • Odour: | Odourless |
| • Odour threshold: | Not applicable |

| | |
|---------------------------------------|-----|
| • pH-value (1.5 g/l) at 20 °C: | 3.1 |
|---------------------------------------|-----|

| | |
|---|----------------|
| • Melting point/Freezing point: | Not determined |
| • Initial boiling point and boiling range: | Not determined |

| | |
|-----------------------|----------------|
| • Flash point: | Not determined |
|-----------------------|----------------|

| | |
|-------------------------------------|-----------------|
| • Flammability (solid, gas): | Not determined. |
| • Ignition temperature: | 340 °C |

| | |
|-------------------------------------|-----------------|
| • Decomposition temperature: | Not determined. |
|-------------------------------------|-----------------|

| | |
|-------------------------------------|-------------------------------|
| • Auto-ignition temperature: | Product is not self-igniting. |
|-------------------------------------|-------------------------------|

| | |
|--------------------------------|--|
| • Explosive properties: | Product is not explosive. The following applies in general to flammable organic substances / preparations: Dust explosion possible if in powder or granular form (fine distribution), mixed with air. |
|--------------------------------|--|

Flammability or explosive limits:

| | |
|-----------------|-----------------|
| • Lower: | Not determined. |
| • Upper: | Not determined. |

| | |
|--------------------------------|------|
| • Oxidising properties: | none |
|--------------------------------|------|

| | |
|----------------------------|-----------------|
| • Vapour pressure: | Not applicable. |
| • Density: | Not determined |
| • Relative density: | Not determined. |
| • Vapour density: | Not applicable. |
| • Evaporation rate: | Not applicable. |

| | |
|---------------------------|----------------------|
| • Solubility(ies): | |
| • Water: | Partially insoluble. |

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| | |
|---|--|
| · Partition coefficient (n-octanol/water): | Not applicable. |
| · Viscosity: | Not applicable. |
| · Solvent content: | |
| Organic solvents: | 0.0 % |
| Solids content: | 100.0 % |
| · 9.2 Other information | No further relevant information available. |

SECTION 10: Stability and reactivity

- **10.1 Reactivity** Dust can combine with air to form an explosive mixture.
- **10.2 Chemical stability** Stable at ambient temperature (room temperature).
- **10.3 Possibility of hazardous reactions**
Aqueous solution reacts acidic.
Reacts with acids
Reacts with oxidizing agents
- **10.4 Conditions to avoid**
strong heating
Strong heating (decomposition)
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** see section 5

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Quantitative data on the toxicity of the preparation are not available.

· LD/LC50 values that are relevant for classification:

| | | |
|---------------------------------------|------|-------------------------------|
| CAS: 121-57-3 sulphanilic acid | | |
| Oral | LD50 | 12300 mg/kg (rat) (IUCLID) |

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes skin irritation.
- **Serious eye damage/irritation** Causes serious eye irritation.

· Information on components:

| | | |
|---------------------------------------|----------|---|
| CAS: 121-57-3 sulphanilic acid | | |
| Irritation of skin | OECD 404 | (rabbit: slight irritation) (IUCLID) |
| Irritation of eyes | OECD 405 | (rabbit: irritation) (IUCLID) |

- **Respiratory or skin sensitisation**
May cause an allergic skin reaction.

· Information on components:

| | | |
|---------------------------------------|----------|------------------------|
| CAS: 121-57-3 sulphanilic acid | | |
| Sensitisation | OECD 406 | (guinea pig: positive) |

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)** The following statements refer to the mixture:
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT (specific target organ toxicity) -single exposure** Based on available data, the classification criteria are not met.
- **STOT (specific target organ toxicity) -repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

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Information on components:**CAS: 121-57-3 sulphanilic acid**

| | |
|----------|---|
| OECD 471 | (negative) (NTP, Salmonella typhimurium) |
|----------|---|

Additional toxicological information:

The following applies to aromatic amines in general: systemic effect - methaemoglobinaemia with headache, cardia dysrhythmia, drop in blood pressure, dyspnoea, spasm,
principal symptom: cyanosis (blue discoloration of the blood)

SECTION 12: Ecological information

12.1 Toxicity**Aquatic toxicity:****CAS: 121-57-3 sulphanilic acid**

| | |
|------|---|
| EC50 | 85.7 mg/l/48h (Daphnia magna) (IUCLID) |
| IC50 | 91 mg/l/72h (Desmodesmus subspicatus) (IUCLID) |
| LC50 | 100.4 mg/l/96h (fathhead minnow) (IUCLID) |

12.2 Persistence and degradability**CAS: 121-57-3 sulphanilic acid**

| | |
|------------|------------------------------------|
| OECD 301 B | 31% / 28d (.) (CO2 Evolution Test) |
|------------|------------------------------------|

Other information:

Quantitative data on the ecological effect of this product are not available.
The following statements refer to the individual components.

12.3 Bioaccumulative potential

log Pow < 1 = Does not accumulate in organisms.

CAS: 121-57-3 sulphanilic acid

| | |
|---------|-----------|
| log Pow | -2.16 (.) |
|---------|-----------|

12.4 Mobility in soil No further relevant information available.**12.5 Results of PBT and vPvB assessment**

This mixture does not contain any substances that are assessed to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB), according to the criteria given in Annex XIII of Regulation (EC) No. 1907/2006.

12.6 Other adverse effects Avoid transfer into the environment.**Water hazard:**

Mixture (Self-assessment acc. VwVwS Annex 4, German regulation):

Water hazard class 1: slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

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.
Hand over to disposers of hazardous waste.

European waste catalogue

| | |
|----------|--|
| 16 05 06 | laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals |
|----------|--|

Uncleaned packagings:**Recommendation:** Disposal must be made according to official regulations.

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SECTION 14: Transport information

| | |
|---|--|
| · 14.1 UN-Number · ADR,RID, ADN, IMDG, IATA | Void |
| · 14.2 UN proper shipping name · ADR,RID, ADN, IMDG, IATA | Void |
| · 14.3 Transport hazard class(es) · ADR,RID, ADN, IMDG, IATA · Class | Void |
| · 14.4 Packing group · ADR,RID, IMDG, IATA | Void |
| · 14.5 Environmental hazards: · Marine pollutant: | No |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |
| · Transport/Additional information: | Not dangerous according to the above specifications. |

SECTION 15: Regulatory information

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

· **Regulation (EC) No 689/2008 concerning the export and import of dangerous chemicals:**

None of the ingredients is listed.

· **Regulation (EC) No 1005/2009 on substances that deplete the ozone layer:**

None of the ingredients is listed.

· **Directive 2012/18/EU (SEVESO III):**

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **Information about limitation of use:**

Observe employment restrictions for pregnant and nursing mothers according to the 'mother protection guideline' (92/85/EEC) .
Employment restrictions concerning young persons must be observed.

· **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**

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

· **Training hints** Provide adequate information, instruction and training for operators.

· **Abbreviations and acronyms:**

EC50: effective concentration, 50 percent (in vivo)

OECD: Organisation for Economic Co-operation and Development

STOT: specific target organ toxicity

SE: single exposure

RE: repeated exposure

EC50: half maximal effective concentration

IC50: half maximal inhibitory concentration

NOEL or NOEC: No Observed Effect Level or Concentration

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

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

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CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1

• Sources

Data arise from safety data sheets, reference works and literature.
IUCLID (International Uniform Chemical Information Database)

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