

1 Identification of the substance/mixture and the company

Product identifier	Aluminium No. 2
Use of substance	Reagent for water analysis
Supplier	WAPOTEC GmbH Carola-Blome-Str. 7 A-5020 Salzburg Tel: +43 662 434342-0 Fax: +43 662 434342-3
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2 Hazards identification

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



GHS02 flame
Flam. Sol. 2 H228 Flammable solid.



GHS07
Skin Sens. 1 H317 May cause an allergic skin reaction.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Xi, Sensitising
R43; May cause sensitisation by skin contact.



F; highly flammable
R11: Highly flammable.

Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labeled according to the CLP regulation.

Hazard pictograms GHS02, GHS07

Signal word Warning

Hazard-determining components of labelling: methenamine

⦿ **Hazard statements**

H228 Flammable solid.

H317 May cause an allergic skin reaction.

⦿ **Precautionary statements**

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition/information on ingredients

⦿ **Chemical characterization: Mixture**

⦿ **Dangerous components:**

CAS: 100-97-0 methenamin

EINECS: 202-905-8

Index number: 612-101-00-2

☒ Xi; R43 ☒ F R11

Warning: ☒ Flam. Sol. 2, H228; ☒ Skin Sens. 1, H317

90-100%

⦿ **REACH – Pre-registered substances** All components are REACH pre-registered.

⦿ **Additional information** For the wording of the listed risk phrases refer to section 16.

4 First-aid measures

⦿ **Description of first aid measures**

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

⦿ **After inhalation** Supply fresh air. Seek medical treatment in case of complaints.

⦿ **After skin contact** Instantly rinse with water. Seek medical treatment.

⦿ **After eye contact** Rinse opened eye for several minutes (at least 10 min) under running water. Seek medical treatment.

⦿ **After swallowing** Rinse out mouth and then drink 1-2 glasses of water. Seek medical treatment in case of complaints.

⦿ **Most important symptoms and effects, both acute and delayed: After inhalation:** coughing, asthma attacks, mucous membrane irritation. **After swallowing of large amounts:** gastric or intestinal trouble, sickness, vomiting, pain. **Danger** risk of skin sensitization

5 Fire-fighting measures

- ⦿ **Extinguishing media**
- ⦿ **Suitable extinguishing agents** Alcohol-resistant foam, Water haze, Carbon dioxide (CO₂), Fire-extinguishing powder
- ⦿ **Special hazards arising from the substance or mixture**
 - Combustible
 - Development of hazardous combustion gases or vapours possible in the event of fire. Nitrogen oxides (NO_x), Hydrogen cyanide (HCN), ammonia (NH₃), formaldehyde.
- ⦿ **Advice for firefighters**
- ⦿ **Protective equipment:**
 - Wear self-contained breathing apparatus.
 - Wear full protective suit.
- ⦿ **Additional information**
 - 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.

6 Accidental release measures

- ⦿ **Person precautions, protective equipment and emergency procedures:** Avoid causing dust. Ensure adequate ventilation. Use breathing protection against the effects of fumes/dust/aerosol.
- ⦿ **Environmental precautions:** Do not allow product to reach sewage system or water bodies. Damp down gases/fumes/haze with water spray jet
- ⦿ **Methods and material for containment and cleaning up:**
 - Collect mechanically. Dispose of contaminated material as waste according to item 13.
- ⦿ **Reference to other sections:** See Section 8 for information on personal protection equipment.

7 Handling and storage

- ⦿ **Handling**
- ⦿ **Precautions for safe handling** Work only in fume cupboard.
- ⦿ **Information about protection against explosions and fires:**
 - Protect against electrostatic charges. Dust can combine with air to form an explosive mixture. Fumes can combine with air to form an explosive mixture. Keep ignition sources away – Do not smoke.
- ⦿ **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 oxidizing

agents.

⦿ **Further information about storage conditions:**

Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. Protect from heat and direct sunlight. Protect from humidity and keep away from water. This product is hygroscopic. Protect from the effects of light.

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

8 Exposure controls and personal protection

⦿ **Additional information about design of technical systems:** No further data; see item 7.

⦿ **Control parameters**

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

⦿ **100-97-0 methenamine (90-100%)**

OEL (Sweden) Short-term value: 5mg/m³

Long-term value: 3mg/m³

S

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

⦿ **Personal protective equipment**

⦿ **General protective and hygienic measures** Avoid contact with the eyes and skin. Do not eat, drink or smoke while working.

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

⦿ **Recommended filter device for short term use:** Filter P2

⦿ **Protection of hands:** Preventive skin protection by use of skin-protection 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**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. Value for the permeation: Level ≥ 1 (>10 min)

⦿ **Eye protection:** Use against the effects of fumes / dust. Tightly sealed safety glasses.

⦿ **Body protection:** Protective work clothing

9 Physical and chemical properties

Information basic physical and chemical properties

Appearance:

- | | |
|------------------|----------------------|
| ⦿ Form: | Tablets |
| ⦿ Colour: | White |
| ⦿ Odour: | Weak, characteristic |

⦿ pH-value (9g/l) at 20°C	7.5
⦿ Melting point/ Metling range:	280, Subl. °C
⦿ Boiling point / Boiling range:	Not determined
⦿ Flash point:	>100°C
⦿ Inflammability (solid, gaseous)	Highly flammable.
⦿ Danger of explosion:	The following applies in general to flammable organic substances/preparations: Dust explosion possible if in powder or granular form (fine distribution), mixed with air.
⦿ Critical values for explosion: Lower	20 g/m ³
⦿ Density at 20°C	1.331 g/cm ³
⦿ Settled apparent density at 20°C	600kg/m ³
⦿ Solubility in / Miscibility with Water at 20°C:	895 g/l
⦿ Solvent content: Organic solvents:	0.0 %
⦿ Solids content:	100 %

10 Stability and reactivity

- ⦿ **Reactivity**
- ⦿ **Chemical stability**
- ⦿ **Thermal decomposition / conditions to be avoided:** strong heating
- ⦿ **Possibility of hazardous reactions:** with nitric acid, acetic anhydride -> Explosive
Strong exothermic reaction with acids. Reacts with halogenated compounds. The product is not capable of dust explosion in the form supplied; enrichment with fine dust causes risk of dust explosion
- ⦿ **Incompatible materials:** acids, peroxides, halogenated hydrocarbons, iodide, halogen compounds, combustible substances, oxidizing agents
- ⦿ **Hazardous decomposition products:**
Nitrous gases, hydrogen cyanide (prussic acid), formaldehyde, ammonia (NH₃)
See chapter 5

11 Toxicological information

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:
100-97-0 methenamine

Oral/LD50/9200 mg/kg (rat)
 (IUCLID)

Primary irritant effect:

- ☉ **on the skin:** temporary erythema possible
- ☉ **on the eye:** Irritant effect.
- ☉ **Sensitization:** Sensitization possible by skin contact.
- ☉ **Experience with humans:** Can cause kidney damages.
- ☉ **Additional toxicological information:** irritant
- ☉ **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)** no data available



12 Ecological information

☉ **Toxicity**

☉ **Aquatic toxicity:**

☉ **100-97-0 methenamine**

EC50	36 mg/l/48h (Daphnia magna) (IUCLID)
LC50	49.8 mg/l/96h (pimephales promelas)
Toxicity EC10	5 g/l (fish)
Toxicity Eco	10 g/l/48h (Daphnia magna)

☉ **Persistence and degradability**

☉ **Other information:** Quantitative data on the ecological effect of this product are not available. The following statements refer to the individual components. CAS-No 100-97-0: 39-47% / 28d. The product is slightly biodegradable.

☉ **Behaviour in environmental systems: 100-97-0 methenamine** log P(o/w); -2.84 (.)

☉ **Bioaccumulative potential** Does not accumulate in organisms

☉ **Ecotoxicological effects:**

☉ **Remark:**

Toxic for fish:

Magnesium compounds: 100-400mg/l

☉ **Bacterial toxicity:** sulphates toxic >2.5 g/l

☉ **Additional ecological information:**







☉ **BSB5-value: 100-97-0 methenamine** BSB5 0.015 g/g (.)

General notes: Water hazard class 1 (German Regulation) (Self-assessment acc VwVWS Annex 4): slightly hazardous for water. Do not allow undiluted product to reach ground water, water bodies or sewage system. Must not reach sewage water or drainage ditch undiluted or unneutralized.

vPvB assessments: no data available



13 Disposal considerations

-  **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.
-  **Recommended cleaning agent:** Water, if necessary with cleaning agent.

14 Transport information

Land transport ADR/RID (cross border)



ADR/RID-GGVS/E class: 4.1 (F1) Flammable solids, self-reactive substances and solid desensitized explosives.

Kemler Number: 40

UN-Number: 1328

Packaging group: III

Label: 4.1

UN proper shipping name: 1328 HEXAMETHYLENETETRAMINE

Limited quantities (LQ): LQ9

Tunnel restriction code: E

Maritime transport IMDG:



IMDG Class: 4.1

UN Number: 1328

Label: 4.1

Packaging group: III

EMS Number: F-A, S-G

Marine pollutant: No

Correct technical name: HEXAMETHYLENETETRAMINE

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: 4.1

UN/ID Number: 1328

Label: 4.1






Packaging group: III

Correct technical name: HEXAMETHYLENETETRAMINE

Un "Model Regulation": UN1328, HEXAMETHYLENETETRAMINE, 4.1, III

Special precautions for user Warning: Flammable solids, self-reactive substances and solid desensitised explosives.

15 Regulatory information

-  **Safety, health and environmental regulations/legislation specific for the substance or mixture**
-  **National regulations**
-  **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.
-  Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information




The information provided on this SDS is correct to the best of our knowledge and information, but not to be considered as warranty or quality specification nor creates contractual relationship. The information given is designed only as a guidance for safe handling. The categorisation according to Dangerous Preparations Directive 1999/45/EC resp. regulation CLP (EC)1272/2008 is based on the classification of the single component according to Annex VI of regulation CLP (EC)1272/2008 as well as on manufacturer's data completed by hazardous material database.

Relevant phrases

H228	Flammable solid
H337	May cause an allergic skin reaction.
R11	Highly flammable.
R43	May cause sensitization by skin contact.

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)
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
IATA-DGR:	Dangerous Goods Regulations by the „International Air Transport Association“ (IATA)
ICAO:	International Civil Aviation Organization

ICAO-TI:	Technical Instructions by the „International Civil Aviation Organization (ICAO)
GHS:	Globally Harmonized System of Classification and Labelling of Chemicals
GefStoffV.	Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
LC50:	Lethal concentration, 50 percent
LD50:	Lethal dose, 50 percent
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 Short cut	---

