

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.03.2018

Version number 2

Revision: 22.03.2018

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

1.1 Product identifier

Trade name: **Basic Crystallizer AK 1**

Article number: 10847, 10982 / 10986

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

Surface protection

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: AKEMI chemisch technische Spezialfabrik GmbH
Lechstrasse 28
D 90451 Nürnberg

Tel. +49(0)911-642960
Fax. +49(0)911-644456
e-mail info@akemi.de

Further information obtainable from:

Laboratory

1.4 Emergency telephone number:

Product Safety Department AKEMI chemisch technische Spezialfabrik GmbH
Tel. +49(0)911-64296-59
Reachable during the following office hours:
Monday – Thursday from 07:30 a.m. to 16:30 p.m.
Friday from 07:30 a.m. to 13:30 p.m.
+44 (171) 635 91 91
National Poison Inform. Centre
Medical Toxicology Unit
Avalonley Road
London SE14 5ER

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms

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



GHS07

Signal word

Warning

Hazard-determining components of labelling:

magnesium hexafluorosilicate

Hazard statements

H302 Harmful if swallowed.

Precautionary statements

P101

If medical advice is needed, have product container or label at hand.

P102

Keep out of reach of children.

P103

Read label before use.

P280

Wear protective gloves / eye protection.

P301+P312

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330

Rinse mouth.

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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.

SECTION 3: Composition/information on ingredients**3.2 Chemical characterisation: Mixtures**

Description: Mixture of substances listed below with nonhazardous additions.


Dangerous components:

CAS: 18972-56-0

EINECS: 241-022-2

Index number: 009-018-00-3

magnesium hexafluorosilicate

 Acute Tox. 3, H301

<12.5%

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:** Immediately remove any clothing soiled by the product. Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- After inhalation:** In case of irregular breathing or respiratory arrest provide artificial respiration. Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.
- After skin contact:** Seek immediate medical advice. Rub in Ca-gluconate solution or Ca-gluconate gel immediately. Seek immediate medical advice. Immediately wash with water and soap and rinse thoroughly.
- After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing:** Do not induce vomiting; call for medical help immediately. Rinse out mouth and then drink plenty of water. Call for a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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:** CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or mixture

Under certain fire conditions, traces of other toxic gases cannot be excluded, e.g.:
Hydrogen fluoride (HF)

5.3 Advice for firefighters

- Protective equipment:** Wear self-contained respiratory protective device.

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· Additional information

Do not inhale explosion gases or combustion gases.
Wear fully protective suit.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures· **6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation

· **6.2 Environmental precautions:**

Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Dilute with plenty of water.
Do not allow to enter sewers/ 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 contaminated material as waste according to item 13.
Ensure adequate ventilation.

· **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 disposal information.

SECTION 7: Handling and storage· **7.1 Precautions for safe handling**

Keep receptacles tightly sealed.
Ensure good ventilation/exhaustion at the workplace.
Store in cool, dry place in tightly closed receptacles.
Prevent formation of aerosols.

· Information about fire - and explosion protection:

The product is not flammable.
No special measures required.

· **7.2 Conditions for safe storage, including any incompatibilities**· Storage:· Requirements to be met by storerooms and receptacles:

Prevent any seepage into the ground.

· Information about storage in one common storage facility:

Store away from foodstuffs.

· Further information about storage conditions:

None.

· Storage class:

12

· **7.3 Specific end use(s)**

No further relevant information available.

SECTION 8: Exposure controls/personal protection· Additional information about design of technical facilities:

No further data; see item 7.

· **8.1 Control parameters**· Ingredients with limit values that require monitoring at the workplace:

18972-56-0 magnesium hexafluorosilicate

TWA Long-term value: 2.5 mg/m³

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· Additional information:

The lists valid during the making were used as basis.

· **8.2 Exposure controls**· Personal protective equipment:· General protective and hygienic measures:

Do not eat, drink, smoke or sniff while working.
 Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing
 Wash hands before breaks and at the end of work.
 Do not inhale gases / fumes / aerosols.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· Protection of hands:

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

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

The protection gloves to be used have to comply with the specifications of the directive 89/686/EC and the directive derived decree EN374, respectively, e.g. the above listed protection glove type. The mentioned permeation times' data were generated and verified with material samples of the recommended protection glove type in the scope of laboratory analyses of the company KCL GmbH in compliance with EN374.

This recommendation refers exclusively to the material safety data sheet referenced product delivered by Akemi and the indicated field of application. In case of product dilution or in case of mixture with different substances or chemicals, and in condition of EN374 deviation the producer of CE-approved protection gloves must be contacted for detailed information (e.g., KCL GmbH, Germany, 36124 Eichenzell, internet: <http://www.kcl.de>).

**Protective gloves**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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

· Material of gloves

Nitrile rubber, NBR

Chloroprene rubber, CR

Butyl rubber, BR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove materialValue for the permeation: Level \leq 6, 480 min

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

 · For the permanent contact gloves made of the following materials are suitable:

Nitrile rubber, NBR

Camatril (KCL, Art_No. 730, 731, 732, 733)

Dermatril (Art_No. 740, 741, 742)

Chloroprene rubber, CR

Camapren (KCL, Art_No. 720, 722, 726)

Butyl rubber, BR

Butoject (KCL, Art_No. 897, 898)

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

Nitrile rubber, NBR

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- | | |
|---|---|
| <ul style="list-style-type: none"> · Not suitable are gloves made of the following materials: · <u>Eye protection:</u> · <u>Body protection:</u> | Camatril (KCL, 730, 731, 732, 733)
Dermatril (KCL, Art_No. 740, 741, 742)
Chloroprene rubber, CR
Camapren (KCL, Art_No. 720, 722, 726)

Leather gloves
Strong material gloves
Safety glasses
Goggles recommended during refilling
Protective work clothing |
|---|---|

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

- | | |
|---------|-----------|
| Form: | Liquid |
| Colour: | Blue |
| Odour: | Odourless |

- | | |
|----------------------|---|
| · pH-value at 20 °C: | 3 |
|----------------------|---|

· Change in condition

- | | |
|--|---------------|
| Melting point/freezing point: | Undetermined. |
| Initial boiling point and boiling range: | 100 °C |

- | | |
|----------------|-----------------|
| · Flash point: | Not applicable. |
|----------------|-----------------|

- | | |
|------------------------------|--------|
| · Decomposition temperature: | 120 °C |
|------------------------------|--------|

- | | |
|------------------------------|------------------------------|
| · Auto-ignition temperature: | Product is not selfigniting. |
|------------------------------|------------------------------|

- | | |
|-------------------------|---|
| · Explosive properties: | Product does not present an explosion hazard. |
|-------------------------|---|

- | | |
|-----------------------------|--------|
| · Vapour pressure at 20 °C: | 23 hPa |
|-----------------------------|--------|

- | | |
|---------------------|-----------|
| · Density at 20 °C: | 1.1 g/cm³ |
|---------------------|-----------|

- | | |
|---|-----------------|
| · Solubility in / Miscibility with water: | Fully miscible. |
|---|-----------------|

· Viscosity:

- | | |
|------------|-----------------------------------|
| Dynamic: | Not determined.
Not applicable |
| Kinematic: | Not determined.
Not applicable |

· Solvent content:

- | | |
|-------------------|--------|
| Organic solvents: | 0.0 % |
| Water: | 88.0 % |

- | | |
|-----------------|-------|
| Solids content: | 0.4 % |
|-----------------|-------|

- | | |
|--------------------------------|--|
| · 9.2 Other information | No further relevant information available. |
|--------------------------------|--|

SECTION 10: Stability and reactivity

- | | |
|--------------------------|--|
| · 10.1 Reactivity | No further relevant information available. |
|--------------------------|--|

· **10.2 Chemical stability**

- | | |
|---|---|
| · Thermal decomposition / conditions to be avoided: | No decomposition if used according to specifications. |
|---|---|

· **10.3 Possibility of hazardous reactions**

Reacts with alkali (lyes).

· **10.4 Conditions to avoid**

No further relevant information available.

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- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** Hydrogen fluoride
Irritant gases/vapours

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- Acute toxicity Harmful if swallowed.

· LD/LC50 values relevant for classification:**ATE (Acute Toxicity Estimates)**

Oral LD50 837 mg/kg

18972-56-0 magnesium hexafluorosilicate

Oral LD50 100 mg/kg (ATE)

- Primary irritant effect:
- Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eye damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
- 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-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
- Aquatic toxicity: No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- Additional ecological information:
- General notes: Do not allow product to reach ground water, water course or sewage system.
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Avoid transfer into the environment.
- **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 be specially treated adhering to official regulations.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packaging:
- Recommendation: Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

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- Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information· **14.1 UN-Number**

- ADR, ADN, IMDG, IATA Void

· **14.2 UN proper shipping name**

- ADR, ADN, IMDG, IATA Void

· **14.3 Transport hazard class(es)**

- ADR, ADN, IMDG, IATA
- Class Void

· **14.4 Packing group**

- ADR, 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.

- UN "Model Regulation": Void

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.

- REGULATION (EC) No 1907/2006 ANNEX XVII

Conditions of restriction: 3

- National regulations:

- Information about limitation of use: Employment restrictions concerning juveniles must be observed.

- Waterhazard class:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

- VOC EU

0.0 g/l

· **15.2 Chemical safety assessment:**

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant phrases H301 Toxic if swallowed.

- Department issuing SDS: Laboratory

- Contact: Dieter Zimmermann

- 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)

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LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 3: Acute toxicity – Category 3
Acute Tox. 4: Acute toxicity – Category 4

• * Data compared to the previous
version altered.

Adaptation in accordance with REACH directive 1907/2006/EC

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