



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

Printing date 16.09.2013


Version number 2

Revision: 16.09.2013

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

- **1.1 Product identifier**
- **Trade name:** KEIM Algicid-Plus
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** Biocide
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
KEIM MINERAL PAINTS LTD
Santok Building
Deer Park Way
Donnington Wood
Telford
Shropshire
TF2 7NA
United Kingdom
Tel: +44 1952 231250
Fax: +44 1952 231251
Url: <http://www.keimpaints.co.uk>
- **Further information obtainable from:**
David Pratt
Telefon: +44 1952 231250
E-Mail: sales@keimpaints.co.uk
- **1.4 Emergency telephone number:**
GBK Gefahrgut Büro GmbH
Emergency number: +49(0)6132/84463

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
 - **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
Xi; Sensitising
R43: May cause sensitisation by skin contact.
 - **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
 - **2.2 Label elements**
 - **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
 - **Code letter and hazard designation of product:**
- 

Xi Irritant
- **Hazard-determining components of labelling:**
2-octyl-2H-isothiazol-3-one

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- **Risk phrases:**
43 May cause sensitisation by skin contact.
- **Safety phrases:**
2 Keep out of the reach of children.
24 Avoid contact with skin.
35 This material and its container must be disposed of in a safe way.
37 Wear suitable gloves.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures** Isothiazolinone-preparation
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 26530-20-1 EINECS: 247-761-7 Index number: 613-112-00-5	2-octyl-2H-isothiazol-3-one T R23/24; C R34; Xn R22; Xi R43; N R50/53 Acute Tox. 3, H311; Acute Tox. 3, H331; Skin Corr. 1B, H314; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Skin Sens. 1, H317	0.081%
CAS: 7173-51-5 EINECS: 230-525-2 Index number: 612-131-00-6	didecyldimethylammonium chloride C R34; Xn R22 Skin Corr. 1B, H314; Acute Tox. 4, H302	0.36%

- **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:**
When seeing the doctor we suggest to present this safety data sheet.
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
Immediately 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. Then consult a doctor.
- **After swallowing:**
Rinse mouth and throat well with water.
Do not induce vomiting; call for medical help immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.

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- **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.
- **5.2 Special hazards arising from the substance or mixture**
No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**
In case of fire do not breath smoke, fumes and vapours.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Avoid contact with skin and eyes.
Do not inhale fumes.
Ensure adequate ventilation
Respect the protection rules (see section 7 a. 8).
Keep casual persons away.
- **6.2 Environmental precautions:**
Do not allow product to reach soil, sewage system or any water course.
Follow local governmental rules and regulations.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of the material collected according to regulations.
Clear contaminated areas thoroughly.
- **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.
Avoid contact with skin and eyes.
Prevent formation of aerosols.
See item 8 for information about suitable protective equipment and technical precautions.
Respect the protection rules.
- **Information about fire - and explosion protection:** No special measures required.

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- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store only in unopened original receptacles.
Keep in the original containers in a cool and dry place.
- **Information about storage in one common storage facility:**
Store away from reducing agents.
Store away from oxidizing agents.
Do not store together with alkalis (caustic solutions).
- **Further information about storage conditions:**
Store in a cool place.
Protect from frost.
Protect from heat and direct sunlight.
- **Storage class:** 12
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Do not inhale aerosols.
- **Respiratory protection:**
Use suitable respiratory protective device only when aerosol or mist is formed.
- **Protection of hands:** Protective gloves
- **Material of gloves**
suitable material e.g.:
Nitrile impregnated cotton-gloves
Butyl rubber, BR
Recommended thickness of the material: ≥ 0.5 mm
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 material**
Value for the permeation: Level ≥ 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.
- **Eye protection:** Safety glasses

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· **Body protection:** Protective work clothing

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SECTION 9: Physical and chemical properties

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

· **General Information**

· **Appearance:**

· Form:	Fluid
· Colour:	Clear
· Odour:	Odourless

· **pH-value at 20 °C:** 6*

· **Change in condition**

· Melting point/Melting range:	~0 °C
· Boiling point/Boiling range:	100 °C

· **Flash point:** > 100 °C

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

· **Oxidizing properties** Not applicable.

· **Vapour pressure at 20 °C:** ~23 hPa

· **Density at 20 °C:** 1* g/cm³

· **Vapour density** Not applicable.

· **Evaporation rate** Not applicable.

· **Solubility in / Miscibility with water:**

Fully miscible.

· **Partition coefficient (n-octanol/water):** Not applicable.

· **Viscosity:**

· **Dynamic:** Not determined.

· **Kinematic:** Not determined.

· **9.2 Other information**

* The values are for freshly produced material and may change with the time.

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** No dangerous reactions known.

· **10.4 Conditions to avoid** No further relevant information available.

· **10.5 Incompatible materials:**

reducing agents

oxidizing agents

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Bases

- **10.6 Hazardous decomposition products:**
No hazardous decomposition products if stored and handled as prescribed.

SECTION 11: Toxicological information

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

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

26530-20-1 2-octyl-2H-isothiazol-3-one

Oral	LD50	318 mg/kg (rat)
Dermal	LD50	311 mg/kg (rabbit)
Inhalative	LC50/4 h	0.58 mg/l (rat)

7173-51-5 didecyldimethylammonium chloride

Oral	LD50	84 mg/kg (rat)
Dermal	LD50	1300 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** Frequent persistent contact with the skin may cause skin irritation.
- **on the eye:** In case of longer exposure, irritating effect is possible.
- **during swallowing:** Irritant effect possible
- **Other information (about experimental toxicology):**
Experimental analysis are not available.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant
- **Sensitisation** May cause sensitisation by skin contact.

SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

26530-20-1 2-octyl-2H-isothiazol-3-one

EC 50/48h	0.32 mg/l (daphnia)
LC 50/96 h	0.047 mg/l (fish)

7173-51-5 didecyldimethylammonium chloride

EC 50/48h	0.062 mg/l (daphnia)
EC 50/96h	0.014 mg/l (algae)
LC 50/96 h	0.19 mg/l (fish)

- **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.

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- **Additional ecological information:**
- **AOX-indication:**
The product can take influence in small measure on the AOX-load of the waste water.
- **According to the formulation contains the following heavy metals and compounds from the EU guideline NO. 2006/11/EC:**
According to our current data base the product does not consist of any heavy metals or substances of EU-directives 76/464/EWG.
- **General notes:**
At present there are no ecotoxicological assessments.
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
- **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**
Disposal must be made according to official regulations.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- | | |
|-----------------------------------|--------------------------------|
| · European waste catalogue | |
| 07 06 99 | wastes not otherwise specified |
- **Uncleaned packaging:**
 - **Recommendation:** Disposal must be made according to official regulations.
 - **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- | | |
|--|-----------------|
| · 14.1 UN-Number | |
| · ADR, IMDG, IATA | Void |
| · 14.2 UN proper shipping name | |
| · ADR, IMDG, IATA | Void |
| · 14.3 Transport hazard class(es) | |
| · ADR, 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. |

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- | | |
|--|--|
| <ul style="list-style-type: none"> · 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. | |
| <ul style="list-style-type: none"> · Transport/Additional information: No dangerous good in sense of these transport regulations. | |

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations:**
- **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **Product-Code/Giscode:** GD0
- **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**
 - H302 Harmful if swallowed.
 - H311 Toxic in contact with skin.
 - H314 Causes severe skin burns and eye damage.
 - H317 May cause an allergic skin reaction.
 - H331 Toxic if inhaled.
 - H400 Very toxic to aquatic life.
 - H410 Very toxic to aquatic life with long lasting effects.
 - R22 Harmful if swallowed.
 - R23/24 Toxic by inhalation and in contact with skin.
 - R34 Causes burns.
 - R43 May cause sensitisation by skin contact.
 - R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Department issuing MSDS:** KEIMFARBEN Germany, Product safety department
- **Contact:** Mrs. Popescu
- *** Data compared to the previous version altered.**

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