



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

Printing date 01.08.2017

Version number 12

Revision: 01.08.2017

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

· **1.1 Product identifier**

· Trade name: **KEIM ALGICID**
(ALGICID-PLUS)

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**

- **Application of the substance / the mixture** Biocide
- **Uses advised against** All other uses are not recommended.

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

KEIM MINERAL PAINTS LTD
Santok Building / Deer Park Way, Donnington Wood GB-Telford, Shropshire TF2 7NA
Tel +44 1952 231 250 / Fax +44 1952 231 251
www.keim.com / sales@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 GmbH Global Regulatory Compliance
Emergency number: +49(0)6132/84463

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.

· **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:**

2-octyl-2H-isothiazol-3-one
didecyldimethylammonium chloride

· **Hazard statements**

H317 May cause an allergic skin reaction.

· **Precautionary statements**

P102 Keep out of reach of children.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves.

(Contd. on page 2)



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Version number 12

Revision: 01.08.2017

**Trade name: KEIM ALGICID
(ALGICID-PLUS)**

(Contd. of page 1)

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

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

P363 Wash contaminated clothing before reuse.

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

· **Information concerning particular hazards for human and environment:**

Contact with skin and inhalation of aerosols / vapours of the preparation should be avoided.

· **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**

· **Description:** Isothiazolinone-preparation

· **Dangerous components:**

CAS: 7173-51-5 EINECS: 230-525-2 Index number: 612-131-00-6	didecyldimethylammonium chloride ☠ Acute Tox. 3, H301; ☠ Skin Corr. 1B, H314; ☠ Aquatic Acute 1, H400	0.36%
CAS: 26530-20-1 EINECS: 247-761-7 Index number: 613-112-00-5	2-octyl-2H-isothiazol-3-one ☠ Acute Tox. 3, H311; Acute Tox. 3, H331; ☠ Skin Corr. 1B, H314; Eye Dam. 1, H318; ☠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ☠ Acute Tox. 4, H302; Skin Sens. 1, H317	0.081%

· **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:** 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.

Do not use solvents or thinners.

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.

(Contd. on page 3)



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

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Version number 12

Revision: 01.08.2017

**Trade name: KEIM ALGICID
(ALGICID-PLUS)**

(Contd. of page 2)

- **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.
- **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 breathe 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.

(Contd. on page 4)



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

Printing date 01.08.2017

Version number 12

Revision: 01.08.2017

**Trade name: KEIM ALGICID
(ALGICID-PLUS)**

(Contd. of page 3)

Do not inhale 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.

· **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 oxidising 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:**

Avoid contact with the eyes and skin.

Do not inhale aerosols.

Wash hands before breaks and at the end of work.

Immediately remove all soiled and contaminated clothing

· **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

(Contd. on page 5)



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Version number 12

Revision: 01.08.2017

**Trade name: KEIM ALGICID
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(Contd. of page 4)

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.

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** See Section 12 and 6.2

SECTION 9: Physical and chemical properties

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

· **General Information**

· **Appearance:**

· **Form:** Fluid

· **Colour:** Clear

· **Odour:** Odourless

· **Odour threshold:** Not determined.

· **pH-value at 20°C:** ~6*

· **Change in condition**

· **Melting point/freezing point:** ~0°C

· **Initial boiling point and boiling range:** 100°C

· **Flash point:** >100°C

· **Flammability (solid, gas):** Not applicable.

· **Ignition temperature:** Not determined.

· **Decomposition temperature:** Not determined.

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

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

· **Explosion limits:**

· **Lower:** Not applicable.

· **Upper:** Not applicable.

· **Oxidising properties:** Not applicable.

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

(Contd. on page 6)



Safety data sheet

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Version number 12

Revision: 01.08.2017

**Trade name: KEIM ALGICID
(ALGICID-PLUS)**

(Contd. of page 5)

· Density at 20°C:	1.0-1.1* g/cm ³
· Relative density	Not determined.
· Vapour density	Not applicable.
· Evaporation rate	Not determined.
· 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** No further relevant information available.
- **10.2 Chemical stability** Stable under normal conditions of storage and use.
- **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
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** Based on available data, the classification criteria are not met.

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

7173-51-5 didecyldimethylammonium chloride

Oral	LD50	238 mg/kg (rat)
Dermal	LD50	2,930 mg/kg (rabbit)

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

Oral	LD50	318 mg/kg (rat)
Dermal	LD50	311 mg/kg (rabbit)

(Contd. on page 7)



Safety data sheet

according to 1907/2006/EC, Article 31

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Version number 12

Revision: 01.08.2017

**Trade name: KEIM ALGICID
(ALGICID-PLUS)**

(Contd. of page 6)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Frequent persistent contact with the skin may cause skin irritation.
- **Serious eye damage/irritation** In case of longer exposure, irritating effect is possible.
- **during inhalation:** Irritant effect possible.
- **during swallowing:** Irritant effect possible
- **Respiratory or skin sensitisation**
May cause an allergic skin reaction.
- **Other information (about experimental toxicology):**
Experimental analysis are not available.
The product was not tested. The statements on toxicology have been derived from the properties of the individual components.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)** not applicable
- **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:

7173-51-5 didecyldimethylammonium chloride

EC 50/48h	0.01 mg/l (daphnia)
EC 50/72 h	3.6 mg/l (algae)
LC 50/96 h	0.19 mg/l (fish)

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

EC 50/48h	0.32 mg/l (daphnia) (OECD 202)
EC 50/3h	30.2 mg/l (activated sludge) (OECD 209)
EC 50/72 h	0.084 mg/l (algae) (OECD 201)
LC 50/96 h	0.047 mg/l (fish) (OECD 203)

- **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:

· AOX-indication:

Due to the substance of content which do not include organic jointed halogens, the product can not take influence 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.

(Contd. on page 8)



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

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Version number 12

Revision: 01.08.2017

**Trade name: KEIM ALGICID
(ALGICID-PLUS)**

(Contd. of page 7)

- **General notes:**
At present there are no ecotoxicological assessments.
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
- **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 with household garbage. Do not allow product to reach sewage system.
- **European waste catalogue**

07 06 99	wastes not otherwise specified
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- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary 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. |
| · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |

(Contd. on page 9)



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according to 1907/2006/EC, Article 31

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**Trade name: KEIM ALGICID
(ALGICID-PLUS)**

(Contd. of page 8)

· Transport/Additional information:	No dangerous good in sense of these transport regulations.
· UN "Model Regulation":	Void

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**
For information on labelling please refer to section 2 of this document.
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **National regulations:**
- **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **Other regulations, limitations and prohibitive regulations**
- **Please note:**
TRGS 200 (Germany)
TRGS 500 (Germany)
TRGS 510 (Germany)
TRGS 900 (Germany)
- **Substances of very high concern (SVHC) according to REACH, Article 57** not applicable
- **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.
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.
H318 Causes serious eye damage.
H331 Toxic if inhaled.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
- **Department issuing SDS:** KEIMFARBEN Germany, Product safety department
- **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

(Contd. on page 10)



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

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Version number 12

Revision: 01.08.2017

**Trade name: KEIM ALGICID
(ALGICID-PLUS)**

(Contd. of page 9)

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)
TRGS: Technische Regeln für Gefahrstoffe (Technical Rules for Dangerous Substances, BAuA, Germany)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
EC10: Effective concentration at 10% mortality rate.
EC50: Half maximal effective concentration.
LC10: Lethal concentration at 10% mortality rate.
NOEC: No observed effect concentration.
REACH: Registration, Evaluation and Authorisation of Chemicals (Regulation (EC) No.1907/2006)
Acute Tox. 3: Acute toxicity – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

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