

# Safety Data Sheet

according to 1907/2006/EC, Article 31



Printing date 07.12.2010

Revision: 07.12.2010

## 1 Identification of the substance/preparation and of the company/undertaking

- **Product details**
- **Trade name:** **KEIM MX Glaze Cleaner (695)**
- **Application of the substance / the preparation** Cleaning agent/ Cleaner
- **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](mailto:sales@keimpaints.co.uk)
- **Information in case of emergency:**  
GBK Gefahrgut Büro GmbH  
Emergency number: +49(0)6132/84463

## 2 Hazards identification

- **Hazard description:** not applicable
- **Information concerning particular hazards for human and environment:**  
The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system:**  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

## 3 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Di-basic esters, neutralised natural fatty acids, propylene glycol ethers, water.
- **Dangerous components:** Void

## 4 First aid measures

- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**  
Wash off immediately with water and soap and rinse well afterwards.  
If skin irritation continues, consult a doctor.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. Then consult a doctor.

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- **After swallowing:**  
Do not induce vomiting.  
Rinse mouth and throat well with water.

### 5 Fire-fighting measures

- **Suitable extinguishing agents:**  
Product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.
- **Special hazards caused by the substance, its products of combustion or resulting gases:**  
In case of fire, the following can be released:  
carbon oxide (COx)
- **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.

### 6 Accidental release measures

- **Person-related safety precautions:**  
Respect the protection rules (see section 7 a. 8).  
Avoid contact with skin and eyes.  
Particular danger of slipping on leaked/spilled product.
- **Measures for environmental protection:**  
Do not allow product to reach soil, sewage system or any water course.  
Follow local governmental rules and regulations.
- **Measures for cleaning/collecting:**  
Flush rests with sufficient amount of water.  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose of the material collected according to regulations.  
Clear contaminated areas thoroughly.
- **Additional information:**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.  
No dangerous substances are released.

### 7 Handling and storage

- **Handling:**
- **Information for safe handling:**  
Avoid contact with skin and eyes.  
Keep receptacles tightly sealed.  
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.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Store only in unopened original receptacles.

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- Keep in the original containers in a cool and dry place.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
  - Store receptacle in a well ventilated area.
  - Store in a cool place.
  - Protect from frost.
- **Storage class:** 12

## 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **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.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
  - Do not eat or drink while working.
  - 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.
  - Filter: P
- **Protection of hands:** Protective gloves
- **Material of gloves**
  - suitable material e.g.:
  - Nitrile impregnated cotton-gloves
  - PVC or PE gloves
  - Recommended thickness of the material:  $\geq 0.5$  mm
  - Natural rubber, NR
  - Recommended thickness of the material:  $\geq 0.5$  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  $\geq 6$  (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:** Goggles recommended during refilling
- **Body protection:** Protective work clothing

## 9 Physical and chemical properties

### · General Information

<b>Form:</b>	Fluid
<b>Colour:</b>	Light yellow

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<b>Odour:</b>	Fruit-like
<b>· Change in condition</b>	
<b>Melting point/Melting range:</b>	0°C
<b>Boiling point/Boiling range:</b>	100°C
<b>· Flash point:</b>	> 60°C
<b>· Self-igniting:</b>	Product is not selfigniting.
<b>· Danger of explosion:</b>	Product does not present an explosion hazard.
<b>· Explosion limits:</b>	
<b>Oxidizing properties</b>	Not applicable.
<b>· Vapour pressure:</b>	Not determined
<b>· Density at 20°C:</b>	1.03* g/cm <sup>3</sup>
<b>· Vapour density</b>	non-applicable
<b>· Evaporation rate</b>	non-applicable
<b>· Solubility in / Miscibility with water:</b>	miscible
<b>· pH-value at 25°C:</b>	7.5-8.5* (10% in water)
<b>· Segregation coefficient (n-octanol/water):</b>	non-applicable
<b>· Viscosity:</b>	
<b>Dynamic at 20°C:</b>	50 mPas
<b>· Additional information:</b>	* The values are for freshly produced material and may change with the time.

### 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:**  
No hazardous decomposition products if stored and handled as prescribed.

### 11 Toxicological information

- **Acute toxicity:**
- **LD/LC50 values relevant for classification:** Not determined
- **Primary irritant effect:**
- **on the skin:** Frequent persistent contact with the skin may cause skin irritation.
- **on the eye:** In case of longer exposure, slightly irritating effect is possible.
- **during swallowing:** Irritant effect possible
- **Sensitization:** No sensitizing effects known.
- **Other information (about experimental toxicology):**  
Experimental analysis are not available.

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**· Additional toxicological information:**

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

## 12 Ecological information

**· Additional ecological information:**

**· According to the formulation contains the following heavy metals and compounds from the EU guideline NO. 76/464 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

## 13 Disposal considerations

**· Product:**

**· Recommendation** Disposal must be made according to official regulations.

**· European waste catalogue**

08 01 12	waste paint and varnish other than those mentioned in 08 01 11
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**· Uncleaned packaging:**

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

**· Recommended cleansing agents:** Water, if necessary together with cleansing agents.

## 14 Transport information

**· Land transport ADR/RID (cross-border)**

**· ADR/RID class:** -

**· Maritime transport IMDG:**

**· IMDG Class:** -

**· Air transport ICAO-TI and IATA-DGR:**

**· ICAO/IATA Class:** -

**· Transport/Additional information:**

No dangerous good in sense of these transport regulations.

## 15 Regulatory information

**· Labelling according to EU guidelines:**

Observe the general safety regulations when handling chemicals.

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The product is not subject to classification according to the calculation methods of the "General Classification Guideline for Preparations of the EU" as issued in the latest valid version.

**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.

- **Department issuing MSDS:** Product safety department
- **Contact:** Mrs. Popescu

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### 1 Identification of the substance/preparation and of the company/undertaking

- **Product details**
- **Trade name:** **KEIM MX Glaze Clear (RESIN)**
- **Application of the substance / the preparation** Glazing
- **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](mailto:sales@keimpaints.co.uk)
- **Information in case of emergency:**  
 GBK Gefahrgut Büro GmbH  
 Emergency number: +49(0)6132/84463

### 2 Hazards identification

- **Hazard description:**  
 Xi Irritant
- **Information concerning particular hazards for human and environment:**  
 R 43 May cause sensitisation by skin contact.  
 R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Classification system:**  
 The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

### 3 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 30583-72-3 NLP: 500-070-7	Hydrogenated Bisphenol A-Epichlorhydrine Reaction Product Xi, N; R 43-51/53	15-20%
ELINCS: 400-830-7	Benzotriazol-Hydroxyphenyl Derivate Xn, Xi, N; R 43-48/22-51/53	2-3%

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

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### 4 First aid measures

- **General information:**  
With appearance of symptoms or in cases of doubt seek medical advice .  
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.
- **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 out mouth and then drink plenty of water.  
Do not induce vomiting; call for medical help immediately.

### 5 Fire-fighting measures

- **Suitable extinguishing agents:**  
CO2, powder or water spray. Fight larger fire with alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards caused by the substance, its products of combustion or resulting gases:**  
In case of fire, thick, black smoke develops. Inhalation of the dangerous decomposition products may cause serious health damages.
- **Protective equipment:**  
Wear fully protective suit.  
Wear self-contained respiratory protective device.
- **Additional information**  
Cool endangered receptacles with water spray.  
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.

### 6 Accidental release measures

- **Person-related safety precautions:**  
Avoid contact with skin and eyes.  
Ensure adequate ventilation  
Do not inhale fumes.
- **Measures for environmental protection:**  
Do not allow product to reach soil, sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.
- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Ensure adequate ventilation.  
Dispose of the material collected according to regulations.  
Clear contaminated areas thoroughly.

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### 7 Handling and storage

- **Handling:**
- **Information for safe handling:**  
Avoid contact with skin and eyes.  
Ensure good ventilation/exhaustion at the workplace.  
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:**  
Fumes can combine with air to form an explosive mixture.  
Cool endangered receptacles with water spray.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Keep container tightly closed . Do not empty container under pressure, non-pressure vessel ! Close opened containers carefully and store upright, to prevent any leakage.  
Store only in unopened original receptacles.
- **Information about storage in one common storage facility:**  
Store away from flammable substances.
- **Further information about storage conditions:**  
Store at temperatures between 5 °C and 35 °C.  
Protect from heat and direct sunlight.  
Protect from frost.
- **Storage class:** 12

### 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **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.
- **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.  
Do not inhale gases / fumes / aerosols.  
Avoid contact with the eyes and skin.
- **Respiratory protection:** Suitable respiratory protective device recommended.
- **Protection of hands:** Protective gloves
- **Material of gloves**  
suitable material e.g.:  
Nitrile rubber, NBR  
Natural rubber, NR  
Neoprene gloves  
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.
- **Eye protection:** Tightly sealed goggles

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- **Body protection:**  
Protective work clothing  
After contact with skin wash thoroughly with water.

### 9 Physical and chemical properties

#### · General Information

<b>Form:</b>	Fluid
<b>Colour:</b>	Clear
<b>Odour:</b>	Characteristic

#### · Change in condition

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	Undetermined.

· **Flash point:** 97°C

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

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

· **Vapour pressure at 20°C:** 6 mm Hg

· **Density at 20°C:** 1.1\* g/cm<sup>3</sup> (ISO 2811)

· **Vapour density at 20°C** > air

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

· **pH-value:** Not applicable

· **Additional information:** \* The values are for freshly produced material and may change with the time.

### 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:**  
No hazardous decomposition products if stored and handled as prescribed.

### 11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Frequent persistent contact with the skin may cause skin irritation.
- **on the eye:** Irritating effect.
- **during inhalation:** Irritating to respiratory system.
- **during swallowing:** Irritant effect possible
- **Other information (about experimental toxicology):**  
Experimental analysis are not available.

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· **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.

## 12 Ecological information

· **Ecotoxicological effects:**

- **Aquatic toxicity:** Harmful to aquatic organisms.

· **Additional ecological information:**

· **General notes:**

The product contains materials that are harmful to the environment.

Do not allow product to reach ground water, water course or sewage system.

Harmful to aquatic organisms

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

## 13 Disposal considerations

· **Product:**

· **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Disposal must be made according to official regulations.

· **European waste catalogue**

08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances
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· **Uncleaned packaging:**

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

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

## 14 Transport information

· **Land transport ADR/RID (cross-border)**

- **ADR/RID class:** -

· **Maritime transport IMDG:**

- **IMDG Class:** -

· **Air transport ICAO-TI and IATA-DGR:**

- **ICAO/IATA Class:** -

· **Transport/Additional information:**

No dangerous good in sense of these transport regulations.

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### 15 Regulatory information

**· 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:**

Hydrogenated Bisphenol A-Epichlorhydrine Reaction Product  
Benzotriazol-Hydroxyphenyl Derivate

**· Risk phrases:**

43 May cause sensitisation by skin contact.  
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**· Safety phrases:**

23 Do not breathe fumes/aerosol.  
24 Avoid contact with skin.  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
37 Wear suitable gloves.  
38 In case of insufficient ventilation, wear suitable respiratory equipment.  
61 Avoid release to the environment. Refer to special instructions/safety data sheets.  
46 If swallowed, seek medical advice immediately and show this container or label.

### 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 R-phrases**

43 May cause sensitisation by skin contact.  
48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.  
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**· Department issuing MSDS:** Product safety department

**· Contact:** Mrs. Popescu



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- **Product details**
- **Trade name:** KEIM MX Glaze Clear (CURE)
- **Application of the substance / the preparation** Glazing
- **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](mailto:sales@keimpaints.co.uk)
- **Information in case of emergency:**  
 GBK Gefahrgut Büro GmbH  
 Emergency number: +49(0)6132/84463

### 2 Hazards identification

- **Hazard description:**  
 C Corrosive
- **Information concerning particular hazards for human and environment:**  
 R 21/22 Harmful in contact with skin and if swallowed.  
 R 34 Causes burns.
- **Classification system:**  
 The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

### 3 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 919-30-2 EINECS: 213-048-4	3-aminopropyltriethoxysilane C, Xn; R 22-34	60-70%
CAS: 13822-56-5 EINECS: 237-511-5	3-(trimethoxysilyl)propylamine Xi; R 36/38	25-30%
CAS: 22673-19-4	Dibutylbis(Pentane-2,4-Dionato-o,o')Tin Xn, Xi; R 21-36/38-48/22-52/53	5-7%

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

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### 4 First aid measures

- **General information:**  
With appearance of symptoms or in cases of doubt seek medical advice .  
Immediately remove any clothing soiled by the product.  
When seeing the doctor we suggest to present this safety data sheet.
- **After inhalation:**  
Supply fresh air; consult doctor in case of complaints.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**  
Immediately wash with water and soap and rinse thoroughly.  
Seek medical treatment.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**  
Rinse out mouth and then drink plenty of water.  
Do not induce vomiting; call for medical help immediately.

### 5 Fire-fighting measures

- **Suitable extinguishing agents:**  
CO2, powder or water spray. Fight larger fire with alcohol resistant foam.
- **Special hazards caused by the substance, its products of combustion or resulting gases:**  
In case of fire, thick, black smoke develops. Inhalation of the dangerous decomposition products may cause serious health damages.
- **Protective equipment:**  
Wear fully protective suit.  
Wear self-contained respiratory protective device.
- **Additional information**  
Cool endangered receptacles with water spray.  
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.

### 6 Accidental release measures

- **Person-related safety precautions:**  
Avoid contact with skin and eyes.  
Ensure adequate ventilation  
Do not inhale fumes.  
Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**  
Do not allow product to reach soil, sewage system or any water course.
- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralizing agent.  
Ensure adequate ventilation.  
Dispose of the material collected according to regulations.

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Clear contaminated areas thoroughly.

### 7 Handling and storage

- **Handling:**
- **Information for safe handling:**  
 Avoid contact with skin and eyes.  
 Ensure good ventilation/exhaustion at the workplace.  
 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:**  
 Cool endangered receptacles with water spray.
- **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:**  
 Do not store together with alkalis (caustic solutions).
- **Further information about storage conditions:**  
 Protect from frost.  
 Protect from heat and direct sunlight.  
 Store at temperatures between 5 °C and 35 °C.  
 Keep container tightly sealed.
- **Storage class:** 8B

### 8 Exposure controls/personal protection

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

- **Ingredients with limit values that require monitoring at the workplace:**

**22673-19-4 Dibutylbis(Pentane-2,4-Dionato-o,o')Tin**

OEL	Short-term value: 0.1 mg/m <sup>3</sup> Long-term value: 0.2 mg/m <sup>3</sup>
	Sn

- **Additional information:** The lists valid during the making were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
 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.  
 Avoid contact with the eyes and skin.  
 Do not inhale aerosols.
- **Respiratory protection:** Suitable respiratory protective device recommended.
- **Protection of hands:** Protective gloves
- **Material of gloves**  
 suitable material e.g.:  
 Nitrile rubber, NBR  
 Natural rubber, NR

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GB



## Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 08.12.2010

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**Trade name: KEIM MX Glaze Clear (CURE)**

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Neoprene gloves

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.

- **Eye protection:**

if applicable face protection

Tightly sealed goggles

- **Body protection:**

Impervious protective clothing

After contact with skin wash thoroughly with water.

### 9 Physical and chemical properties

- **General Information**

<b>Form:</b>	Fluid
<b>Colour:</b>	Clear
<b>Odour:</b>	Characteristic

- **Change in condition**

**Melting point/Melting range:** Undetermined.**Boiling point/Boiling range:** Undetermined.

- **Flash point:** 96°C

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

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

- **Density at 20°C:** 1\* g/cm<sup>3</sup> (ISO 2811)

- **Vapour density at 20°C** > air

- **Solubility in / Miscibility with water:** Insoluble.

- **pH-value:** Not applicable

- **Viscosity:**

**Kinematic at 20°C:** < 30 s (ISO 2431 (6 mm))

- **Additional information:** \* The values are for freshly produced material and may change with the time.

### 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

- **Materials to be avoided:**

- **Dangerous reactions** Develops corrosive gases/fumes.

- **Dangerous decomposition products:**

No hazardous decomposition products if stored and handled as prescribed.

GB

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## Safety Data Sheet

according to 1907/2006/EC, Article 31

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Revision: 08.12.2010

Trade name: KEIM MX Glaze Clear (CURE)

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### 11 Toxicological information

- **Acute toxicity:**

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

**919-30-2 3-aminopropyltriethoxysilane**

Oral	LD50	1780 mg/kg (rat)
Dermal	LD50	4000 mg/kg (rabbit)

- **Primary irritant effect:**

- **on the skin:** Caustic effect on skin and mucous membranes.

- **on the eye:** Strong caustic effect.

- **during inhalation:** Irritating to respiratory system.

- **during swallowing:**

Swallowing will lead to a caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

harmful

- **Sensitization:** No sensitizing effects known.

- **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:

Harmful

Corrosive

### 12 Ecological information

- **Additional ecological information:**

- **AOX-indication:**

According to our standard of knowledge the product does not contain any organic bounded halogen.

The product has no influence on the waste water's AOX-value.

- **General notes:**

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

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

### 13 Disposal considerations

- **Product:**

- **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**

08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances
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- **Uncleaned packaging:**

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

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## Safety Data Sheet

according to 1907/2006/EC, Article 31

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**Trade name: KEIM MX Glaze Clear (CURE)**

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

### 14 Transport information

- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** 8 Corrosive substances.
- **UN-Number:** 1760
- **Packaging group:** III
- **Description of goods:** 1760 CORROSIVE LIQUID, N.O.S. (Siloxane Compound)

- **Maritime transport IMDG:**
- **IMDG Class:** 8
- **UN Number:** 1760
- **Packaging group:** III
- **Proper shipping name:** CORROSIVE LIQUID, N.O.S. (Siloxane Compound)

- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** 8
- **UN/ID Number:** 1760
- **Packaging group:** III
- **Proper shipping name:** CORROSIVE LIQUID, N.O.S. (Siloxane Compound)

### 15 Regulatory information

- **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:**  
C Corrosive
- **Hazard-determining components of labelling:**  
3-aminopropyltriethoxysilane
- **Risk phrases:**  
21/22 Harmful in contact with skin and if swallowed.  
34 Causes burns.
- **Safety phrases:**  
23 Do not breathe fumes/aerosol.  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
38 In case of insufficient ventilation, wear suitable respiratory equipment.  
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

### 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.

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**Safety Data Sheet**  
according to 1907/2006/EC, Article 31

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Revision: 08.12.2010

**Trade name: KEIM MX Glaze Clear (CURE)**

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· **Relevant R-phrases**

- 21 Harmful in contact with skin.
- 22 Harmful if swallowed.
- 34 Causes burns.
- 36/38 Irritating to eyes and skin.
- 48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.
- 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **Department issuing MSDS:** Product safety department

· **Contact:** Mrs. Popescu

GB



## Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 07.12.2010

Revision: 07.12.2010

### 1 Identification of the substance/preparation and of the company/ undertaking

- **Product details**
- **Trade name: KEIM MX Glaze Cleaner (for tools/equipment)**
- **Application of the substance / the preparation** Cleaning agent/ Cleaner
- **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](mailto:sales@keimpaints.co.uk)
- **Information in case of emergency:**  
GBK Gefahrgut Büro GmbH  
Emergency number: +49(0)6132/84463

### 2 Hazards identification

- **Hazard description:**  
Xn Harmful
- **Information concerning particular hazards for human and environment:**  
R 10 Flammable.  
R 20/21 Harmful by inhalation and in contact with skin.  
R 36/38 Irritating to eyes and skin.
- **Classification system:**  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

### 3 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 1330-20-7	Xylol, Isomerenmischung	Xn, Xi, F; R 11-20/21-38	60-70%
CAS: 100-41-4 EINECS: 202-849-4	ethylbenzene	Xn, F; R 11-20	12.5-15%
CAS: 108-10-1 EINECS: 203-550-1	4-methylpentan-2-one	Xn, Xi, F; R 11-20-36/37-66	7-10%
CAS: 78-83-1 EINECS: 201-148-0	butanol	Xi; R 10-37/38-41-67	7-10%

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**Trade name: KEIM MX Glaze Cleaner (for tools/equipment)**

(Contd. of page 1)

CAS: 107-98-2	1-methoxy-2-propanol	R 10-67	3-5%
EINECS: 203-539-1			

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

### 4 First aid measures

· **General information:**

With appearance of symptoms or in cases of doubt seek medical advice .  
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

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 out mouth and then drink plenty of water.  
Do not induce vomiting; call for medical help immediately.

### 5 Fire-fighting measures

- **Suitable extinguishing agents:** CO<sub>2</sub>, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards caused by the substance, its products of combustion or resulting gases:**

In case of fire, thick, black smoke develops. Inhalation of the dangerous decomposition products may cause serious health damages.

· **Protective equipment:**

Wear fully protective suit.  
Wear self-contained respiratory protective device.  
Mouth respiratory protective device.

· **Additional information**

Cool endangered receptacles with water spray.  
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.

### 6 Accidental release measures

· **Person-related safety precautions:**

Avoid contact with skin and eyes.  
Ensure adequate ventilation  
Keep away from ignition sources.  
Do not inhale fumes.  
Wear protective equipment. Keep unprotected persons away.

(Contd. on page 3)



## Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 07.12.2010

Revision: 07.12.2010

**Trade name: KEIM MX Glaze Cleaner (for tools/equipment)**

(Contd. of page 2)

- **Measures for environmental protection:**  
Do not allow product to reach soil, sewage system or any water course.
- **Measures for cleaning/collecting:**  
Absorb with non-combustible liquid-binding material (sand, diatomite, vermiculite).  
Ensure adequate ventilation.  
Dispose of the material collected according to regulations.  
Clear contaminated areas thoroughly.

### 7 Handling and storage

- **Handling:**
- **Information for safe handling:**  
Avoid contact with skin and eyes.  
Ensure good ventilation/exhaustion at the workplace.  
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:**  
Fumes can combine with air to form an explosive mixture.  
Cool endangered receptacles with water spray.  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Keep container tightly closed. Do not empty container under pressure, non-pressure vessel!  
Close opened containers carefully and store upright, to prevent any leakage.  
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 flammable substances.
- **Further information about storage conditions:**  
Store at temperatures between 5 °C and 20 °C.  
Protect from frost.  
Protect from heat and direct sunlight.  
Keep container tightly sealed.
- **Storage class:** 3A

### 8 Exposure controls/personal protection

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

- **Ingredients with limit values that require monitoring at the workplace:**

#### 100-41-4 ethylbenzene

WEL	Short-term value: 552 mg/m <sup>3</sup> , 125 ppm Long-term value: 441 mg/m <sup>3</sup> , 100 ppm
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#### 108-10-1 4-methylpentan-2-one

WEL	Short-term value: 416 mg/m <sup>3</sup> , 100 ppm Long-term value: 208 mg/m <sup>3</sup> , 50 ppm
	Sk

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GB



## Safety Data Sheet

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**Trade name: KEIM MX Glaze Cleaner (for tools/equipment)**

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**78-83-1 butanol**

WEL Short-term value: 231 mg/m<sup>3</sup>, 75 ppm  
 Long-term value: 154 mg/m<sup>3</sup>, 50 ppm

**107-98-2 1-methoxy-2-propanol**

WEL Short-term value: 560 mg/m<sup>3</sup>, 150 ppm  
 Long-term value: 375 mg/m<sup>3</sup>, 100 ppm  
 Sk

- **Additional information:** The lists valid during the making were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
 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.  
 Avoid contact with the eyes and skin.
- **Respiratory protection:**  
 Use suitable respiratory protective device in case of insufficient ventilation.  
 Suitable respiratory protective device recommended.  
 Combination filter A/P
- **Protection of hands:** Protective gloves
- **Material of gloves**  
 suitable material e.g.:  
 PVA gloves  
 Neoprene gloves  
 Nitrile rubber, NBR  
 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.
- **Eye protection:** Tightly sealed goggles
- **Body protection:**  
 Protective work clothing  
 After contact with skin wash thoroughly with water.

## 9 Physical and chemical properties

- **General Information**

<b>Form:</b>	Fluid
<b>Colour:</b>	colorless, clear
<b>Odour:</b>	Characteristic

- **Change in condition**

**Melting point/Melting range:** Undetermined.  
**Boiling point/Boiling range:** Undetermined.

- **Flash point:** 24°C

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

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**Trade name: KEIM MX Glaze Cleaner (for tools/equipment)**

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· <b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· <b>Explosion limits:</b>	
<b>Lower:</b>	1.0 Vol %
<b>Upper:</b>	13.7 Vol %
· <b>Vapour pressure at 20°C:</b>	6 mm Hg
· <b>Density at 20°C:</b>	0.9* g/cm <sup>3</sup> (ISO 2811)
· <b>Solubility in / Miscibility with water:</b>	Not miscible or difficult to mix.
· <b>pH-value:</b>	Not applicable
· <b>Viscosity:</b>	
<b>Kinematic at 20°C:</b>	<30 s (ISO 2431 (6 mm))
· <b>Additional information:</b>	* The values are for freshly produced material and may change with the time.

### 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **Materials to be avoided:** flammable substances
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:**  
No hazardous decomposition products if stored and handled as prescribed.

### 11 Toxicological information

- **Acute toxicity:**

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

#### 100-41-4 ethylbenzene

Oral	LD50	3500 mg/kg (rat)
Dermal	LD50	17800 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:**  
Harmful by contact with skin  
Irritating to skin.
- **on the eye:** Irritating effect.
- **during inhalation:** Harmful by inhalation
- **during swallowing:** Irritant effect possible
- **Sensitization:** No sensitizing effects known.
- **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:

(Contd. on page 6)



## Safety Data Sheet

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**Trade name: KEIM MX Glaze Cleaner (for tools/equipment)**

Harmful  
Irritant

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### 12 Ecological information

- **Additional ecological information:**
- **According to the formulation contains the following heavy metals and compounds from the EU guideline NO. 76/464 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:**  
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

### 13 Disposal considerations

- **Product:**
  - **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**
- |           |   |
|-----------|---|
| 08 01 11* | waste paint and varnish containing organic solvents or other dangerous substances |
|-----------|---|
- **Uncleaned packaging:**
  - **Recommendation:** Disposal must be made according to official regulations.
  - **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### 14 Transport information

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 3 Flammable liquids.
- **Danger code (Kemler):** 30
- **UN-Number:** 1263
- **Packaging group:** III
- **Hazard label:** 3
- **Description of goods:** 1263 PAINT RELATED MATERIAL, special provision 640E
- **Limited quantities (LQ)** LQ7
- **Transport category** 3

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GB



## Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 07.12.2010

Revision: 07.12.2010

**Trade name: KEIM MX Glaze Cleaner (for tools/equipment)**

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· **Tunnel restriction code D/E**

· **Maritime transport IMDG:**



- **IMDG Class:** 3
- **UN Number:** 1263
- **Label** 3
- **Packaging group:** III
- **EMS Number:** F-E,S-E
- **Proper shipping name:** PAINT RELATED MATERIAL

· **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1263
- **Label** 3
- **Packaging group:** III
- **Proper shipping name:** PAINT RELATED MATERIAL

### 15 Regulatory information

· **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:**

Xn Harmful

· **Hazard-determining components of labelling:**

Xylol, Isomerengemisch

· **Risk phrases:**

- 10 Flammable.
- 20/21 Harmful by inhalation and in contact with skin.
- 36/38 Irritating to eyes and skin.

· **Safety phrases:**

- 23 Do not breathe fumes/aerosol.
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 36/37 Wear suitable protective clothing and gloves.
- 38 In case of insufficient ventilation, wear suitable respiratory equipment.
- 43 In case of fire, use sand, carbon dioxide or powdered extinguishing agent. Never use water.

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## Safety Data Sheet

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**Trade name: KEIM MX Glaze Cleaner (for tools/equipment)**

46 If swallowed, seek medical advice immediately and show this container or label.

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### 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 R-phrases**

- 10 Flammable.
- 11 Highly flammable.
- 20 Harmful by inhalation.
- 20/21 Harmful by inhalation and in contact with skin.
- 36/37 Irritating to eyes and respiratory system.
- 37/38 Irritating to respiratory system and skin.
- 38 Irritating to skin.
- 41 Risk of serious damage to eyes.
- 66 Repeated exposure may cause skin dryness or cracking.
- 67 Vapours may cause drowsiness and dizziness.

· **Department issuing MSDS:** Product safety department

· **Contact:** Mrs. Popescu

GB



## Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 03.12.2010

Revision: 03.12.2010

### 1 Identification of the substance/preparation and of the company/undertaking

- **Product details**
- **Trade name:** **KEIM MX Glaze Colour (RESIN)**
- **Application of the substance / the preparation** Paint
- **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](mailto:sales@keimpaints.co.uk)
- **Information in case of emergency:**  
 GBK Gefahrgut Büro GmbH  
 Emergency number: +49(0)6132/84463

### 2 Hazards identification

- **Hazard description:**  
 Xi Irritant  
 N Dangerous for the environment
- **Information concerning particular hazards for human and environment:**  
 R 43 May cause sensitisation by skin contact.  
 R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Classification system:**  
 The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

### 3 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 30583-72-3 NLP: 500-070-7	Hydrogenated Bisphenol A-Epichlorhydrine Reaction Product Xi, N; R 43-51/53	25-30%
CAS: 7727-43-7 EINECS: 231-784-4	barium sulphate, natural	15-20%
CAS: 41556-26-7 EINECS: 255-437-1	BIS(PENTAMETHYL-4-PIPERIDYL)SEBACATE Xi, N; R 43-50/53	1-2%

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GB



## Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 03.12.2010

Revision: 03.12.2010

**Trade name: KEIM MX Glaze Colour (RESIN)**

(Contd. of page 1)

CAS: 82919-37-7	METHYL(PENTAMETHYL-4-PIPERIDYL)SEBAZATE	< 1%
EINECS: 280-060-4	Xi, N; R 43-50/53	

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

### 4 First aid measures

- **General information:**

With appearance of symptoms or in cases of doubt seek medical advice .  
When seeing the doctor we suggest to present this safety data sheet.

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

- **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 out mouth and then drink plenty of water.  
Do not induce vomiting; call for medical help immediately.

### 5 Fire-fighting measures

- **Suitable extinguishing agents:**

CO2, powder or water spray. Fight larger fire with alcohol resistant foam.

- **For safety reasons unsuitable extinguishing agents:** Water with full jet

- **Special hazards caused by the substance, its products of combustion or resulting gases:**

In case of fire, thick, black smoke develops. Inhalation of the dangerous decomposition products may cause serious health damages.

- **Protective equipment:**

Wear fully protective suit.  
Wear self-contained respiratory protective device.

- **Additional information**

Cool endangered receptacles with water spray.  
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.

### 6 Accidental release measures

- **Person-related safety precautions:**

Avoid contact with skin and eyes.  
Ensure adequate ventilation  
Do not inhale fumes.

- **Measures for environmental protection:**

Do not allow product to reach soil, sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.

- **Measures for cleaning/collecting:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Ensure adequate ventilation.  
Dispose of the material collected according to regulations.

(Contd. on page 3)



## Safety Data Sheet

### according to 1907/2006/EC, Article 31

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**Trade name: KEIM MX Glaze Colour (RESIN)**

(Contd. of page 2)

Clear contaminated areas thoroughly.

## 7 Handling and storage

- **Handling:**
- **Information for safe handling:**  
Avoid contact with skin and eyes.  
Ensure good ventilation/exhaustion at the workplace.  
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:**  
Fumes can combine with air to form an explosive mixture.  
Cool endangered receptacles with water spray.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Keep container tightly closed. Do not empty container under pressure, non-pressure vessel!  
Close opened containers carefully and store upright, to prevent any leakage.  
Store only in unopened original receptacles.
- **Information about storage in one common storage facility:**  
Store away from flammable substances.
- **Further information about storage conditions:**  
Store at temperatures between 5 °C and 35 °C.  
Protect from frost.  
Protect from heat and direct sunlight.
- **Storage class: 12**

## 8 Exposure controls/personal protection

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

- **Ingredients with limit values that require monitoring at the workplace:**

**7727-43-7 barium sulphate, natural**

WEL	Long-term value: 10* 4** mg/m <sup>3</sup> *inhalable dust **respirable dust
-----	---

- **Additional information:** The lists valid during the making were used as basis.
- **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:** Suitable respiratory protective device recommended.
- **Protection of hands:** Protective gloves
- **Material of gloves**  
suitable material e.g.:  
Nitrile rubber, NBR  
Natural rubber, NR  
Neoprene gloves  
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

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## Safety Data Sheet

according to 1907/2006/EC, Article 31

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**Trade name: KEIM MX Glaze Colour (RESIN)**

(Contd. of page 3)

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.

- **Eye protection:** Tightly sealed goggles
- **Body protection:**  
Protective work clothing  
After contact with skin wash thoroughly with water.

### 9 Physical and chemical properties

#### · General Information

<b>Form:</b>	Fluid
<b>Colour:</b>	According to product specification
<b>Odour:</b>	Characteristic

#### · Change in condition

**Melting point/Melting range:** Undetermined.  
**Boiling point/Boiling range:** Undetermined.

· <b>Flash point:</b>	97°C
· <b>Self-igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Vapour pressure at 20°C:</b>	4* mm Hg
· <b>Density at 20°C:</b>	1.5* g/cm <sup>3</sup>
· <b>Solubility in / Miscibility with water:</b>	Not miscible or difficult to mix.
· <b>pH-value:</b>	Not applicable
· <b>Additional information:</b>	* The values are for freshly produced material and may change with the time.

### 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:**  
No hazardous decomposition products if stored and handled as prescribed.

### 11 Toxicological information

#### · Acute toxicity:

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

Oral	LD50	1200 mg/kg (rat)
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(Contd. on page 5)



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**Trade name: KEIM MX Glaze Colour (RESIN)**

(Contd. of page 4)

- **Primary irritant effect:**
- **on the skin:**  
Frequent persistent contact with the skin may cause skin irritation.  
Repeated exposure may cause skin dryness or cracking.
- **on the eye:** Irritating effect.
- **during inhalation:** Irritating to respiratory system.
- **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.

### 12 Ecological information

- **Ecotoxicological effects:**
- **Aquatic toxicity:** Toxic to aquatic organisms.
- **Additional ecological information:**
- **According to the formulation contains the following heavy metals and compounds from the EU guideline NO. 76/464 EC:**  
The product contains TiO<sub>2</sub>.
- **General notes:**  
The product contains materials that are harmful to the environment.  
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

### 13 Disposal considerations

- **Product:**
- **Recommendation** Disposal must be made according to official regulations.

- **European waste catalogue**

08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances
-----------	---

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### 14 Transport information

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 9 Miscellaneous dangerous substances and articles.

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## Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 03.12.2010

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**Trade name: KEIM MX Glaze Colour (RESIN)**

(Contd. of page 5)

- **Danger code (Kemler):** 90
- **UN-Number:** 3082
- **Packaging group:** III
- **Hazard label:** 9
- **Special marking:** Symbol (fish and tree)
- **Description of goods:** 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Hydrogenated Bisphenol A-Epichlorhydrine Reaction Product, BIS(PENTAMETHYL-4-PIPERIDYL)SEBACATE)
- **Limited quantities (LQ)** LQ7
- **Transport category** 3
- **Tunnel restriction code** E

- **Maritime transport IMDG:**



- **IMDG Class:** 9
- **UN Number:** 3082
- **Label** 9
- **Packaging group:** III
- **EMS Number:** F-A,S-F
- **Marine pollutant:** Yes
- **Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Hydrogenated Bisphenol A-Epichlorhydrine Reaction Product, BIS(PENTAMETHYL-4-PIPERIDYL)SEBACATE)

- **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 9
- **UN/ID Number:** 3082
- **Label** 9
- **Special marking:** Symbol (fish and tree)
- **Packaging group:** III
- **Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Hydrogenated Bisphenol A-Epichlorhydrine Reaction Product, BIS(PENTAMETHYL-4-PIPERIDYL)SEBACATE)

### 15 Regulatory information

- **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  
N Dangerous for the environment

(Contd. on page 7)

GB



## Safety Data Sheet

according to 1907/2006/EC, Article 31

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**Trade name: KEIM MX Glaze Colour (RESIN)**

(Contd. of page 6)

**· Hazard-determining components of labelling:**

Hydrogenated Bisphenol A-Epichlorhydrine Reaction Product  
BIS(PENTAMETHYL-4-PIPERIDYL)SEBACATE

**· Risk phrases:**

43 May cause sensitisation by skin contact.  
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**· Safety phrases:**

23 Do not breathe fumes/aerosol.  
24 Avoid contact with skin.  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
37 Wear suitable gloves.  
38 In case of insufficient ventilation, wear suitable respiratory equipment.  
46 If swallowed, seek medical advice immediately and show this container or label.  
61 Avoid release to the environment. Refer to special instructions/safety data sheets.

**· Special labelling of certain preparations:**

Contains METHYL(PENTAMETHYL-4-PIPERIDYL)SEBAZATE, BIS(PENTAMETHYL-4-PIPERIDYL)SEBACATE, Hydrogenated Bisphenol A-Epichlorhydrine Reaction Product. May produce an allergic reaction.

### 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 R-phrases**

43 May cause sensitisation by skin contact.  
50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**· Department issuing MSDS:** Product safety department**· Contact:** Mrs. Popescu

GB

# Safety Data Sheet

according to 1907/2006/EC, Article 31



Printing date 01.12.2010

Revision: 01.12.2010

## 1 Identification of the substance/preparation and of the company/undertaking

- **Product details**
- **Trade name:** **KEIM MX Glaze Colour Base Coat (CURE)**
- **Application of the substance / the preparation** Base coat
- **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](mailto:sales@keimpaints.co.uk)
- **Information in case of emergency:**  
GBK Gefahrgut Büro GmbH  
Emergency number: +49(0)6132/84463

## 2 Hazards identification

- **Hazard description:**  
C Corrosive  
N Dangerous for the environment
- **Information concerning particular hazards for human and environment:**  
R 10 Flammable.  
R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.  
R 34 Causes burns.  
R 43 May cause sensitisation by skin contact.  
R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Classification system:**  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

## 3 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 108-10-1 EINECS: 203-550-1	4-methylpentan-2-one Xn, Xi, F; R 11-20-36/37-66	10-12.5%
CAS: 2855-13-2 EINECS: 220-666-8	3-aminomethyl-3,5,5-trimethylcyclohexylamine C, Xn; R 21/22-34-43-52/53	7-10%

(Contd. on page 2)



## Safety Data Sheet

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**Trade name: KEIM MX Glaze Colour Base Coat (CURE)**

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CAS: 25154-52-3 EINECS: 246-672-0	nonylphenol C, Xn, N; R 22-34-62-50/53-63	3-5%
CAS: 108-94-1 EINECS: 203-631-1	cyclohexanone Xn; R 10-20	3-5%
CAS: 100-51-6 EINECS: 202-859-9	Benzyl alcohol Xn; R 20/22	3-5%
CAS: 90-72-2 EINECS: 202-013-9	2,4,6-tris(dimethylaminomethyl)phenol Xn, Xi; R 22-36/38	3-5%
CAS: 78-83-1 EINECS: 201-148-0	butanol Xi; R 10-37/38-41-67	2-3%
CAS: 3528-63-0 EINECS: 222-551-8	2-(8-Heptadecenyl)-4,5-Dihydro-1H-Imidazole-1-Ethylamine C, Xn, N; R 22-34-51/53	< 1%
CAS: 112-24-3 EINECS: 203-950-6	3,6-diazaoctanethylenediamin C, Xn; R 21-34-43-52/53	< 1%

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

### 4 First aid measures

· **General information:**

With appearance of symptoms or in cases of doubt seek medical advice .

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.

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 out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

### 5 Fire-fighting measures

· **Suitable extinguishing agents:**

CO2, powder or water spray. Fight larger fire with alcohol resistant foam.

· **For safety reasons unsuitable extinguishing agents:** Water with full jet

· **Special hazards caused by the substance, its products of combustion or resulting gases:**

Can form explosive gas-air mixtures.

In case of fire, thick, black smoke develops. Inhalation of the dangerous decomposition products may cause serious health damages.

· **Protective equipment:**

Wear fully protective suit.

Mouth respiratory protective device.

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## Safety Data Sheet

### according to 1907/2006/EC, Article 31

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**Trade name: KEIM MX Glaze Colour Base Coat (CURE)**

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- **Additional information**

Cool endangered receptacles with water spray.  
 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.

## 6 Accidental release measures

- **Person-related safety precautions:**

Wear protective equipment. Keep unprotected persons away.  
 Avoid contact with skin and eyes.  
 Ensure adequate ventilation  
 Keep away from ignition sources.  
 Do not inhale fumes.

- **Measures for environmental protection:**

Do not allow product to reach soil, sewage system or any water course.  
 Inform respective authorities in case of seepage into water course or sewage system.

- **Measures for cleaning/collecting:**

Absorb with non-combustible liquid-binding material (sand, diatomite, vermiculite).  
 Ensure adequate ventilation.  
 Dispose of the material collected according to regulations.  
 Clear contaminated areas thoroughly.  
 Clean with water, not with solvent.

## 7 Handling and storage

- **Handling:**

- **Information for safe handling:**

Ensure good ventilation/exhaustion at the workplace.  
 Prevent formation of aerosols.  
 See item 8 for information about suitable protective equipment and technical precautions.  
 Respect the protection rules.  
 Avoid contact with skin and eyes.

- **Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.  
 Protect against electrostatic charges.  
 Protect from heat.  
 Fumes can combine with air to form an explosive mixture.  
 Cool endangered receptacles with water spray.

- **Storage:**

- **Requirements to be met by storerooms and receptacles:**

Keep container tightly closed . Do not empty container under pressure, non-pressure vessel  
 ! Close opened containers carefully and store upright, to prevent any leakage.  
 Store only in unopened original receptacles.  
 Store in a cool location.

- **Information about storage in one common storage facility:**

Store away from flammable substances.

- **Further information about storage conditions:**

Keep container tightly sealed.  
 Protect from heat and direct sunlight.  
 Store at temperatures between 5 °C and 35 °C.

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## Safety Data Sheet

according to 1907/2006/EC, Article 31

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**Trade name: KEIM MX Glaze Colour Base Coat (CURE)**

(Contd. of page 3)

- Protect from frost.
- **Storage class:** 8A

### 8 Exposure controls/personal protection

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

- **Ingredients with limit values that require monitoring at the workplace:**

#### 108-10-1 4-methylpentan-2-one

WEL	Short-term value: 416 mg/m <sup>3</sup> , 100 ppm
	Long-term value: 208 mg/m <sup>3</sup> , 50 ppm
	Sk

#### 108-94-1 cyclohexanone

WEL	Short-term value: 20 ppm
	Long-term value: 10 ppm
	Sk

#### 78-83-1 butanol

WEL	Short-term value: 231 mg/m <sup>3</sup> , 75 ppm
	Long-term value: 154 mg/m <sup>3</sup> , 50 ppm

- **Additional information:** The lists valid during the making were used as basis.

- **Personal protective equipment:**

- **General protective and hygienic measures:**

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.  
 Avoid contact with the eyes and skin.  
 Do not inhale aerosols.

- **Respiratory protection:** Suitable respiratory protective device recommended.

- **Protection of hands:** Protective gloves

- **Material of gloves**

suitable material e.g.:  
 PVA gloves  
 Natural rubber, NR  
 Neoprene gloves

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.

- **Eye protection:**

Tightly sealed goggles  
 if applicable face protection

- **Body protection:**

Protective work clothing  
 Impervious protective clothing  
 After contact with skin wash thoroughly with water.

GB

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## Safety Data Sheet

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Printing date 01.12.2010

Revision: 01.12.2010

<b>Trade name: KEIM MX Glaze Colour Base Coat (CURE)</b>
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(Contd. of page 4)

### 9 Physical and chemical properties

#### · General Information

<b>Form:</b>	Fluid
<b>Colour:</b>	According to product specification
<b>Odour:</b>	Characteristic

#### · Change in condition

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	Undetermined.

<b>· Flash point:</b>	26°C
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<b>· Self-igniting:</b>	Product is not selfigniting.
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<b>· Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
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#### · Explosion limits:

<b>Lower:</b>	1.2 Vol %
<b>Upper:</b>	13.0 Vol %

<b>· Vapour pressure at 20°C:</b>	4 mm Hg
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<b>· Density at 20°C:</b>	1.4* g/cm <sup>3</sup>
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<b>· Solubility in / Miscibility with water:</b>	Not miscible or difficult to mix.
--	-----------------------------------

<b>· pH-value:</b>	Not applicable
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<b>· Additional information:</b>	* The values are for freshly produced material and may change with the time.
----------------------------------	--

### 10 Stability and reactivity

#### · Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

#### · Materials to be avoided: flammable substances

#### · Dangerous reactions Develops corrosive gases/fumes.

#### · Dangerous decomposition products:

No hazardous decomposition products if stored and handled as prescribed.

### 11 Toxicological information

#### · Acute toxicity:

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

**25154-52-3 nonylphenol**

Oral	LD50	1620 mg/kg (rat)
------	------	------------------

#### · Primary irritant effect:

##### · on the skin:

Caustic effect on skin and mucous membranes.

Has de-greasing effect on the skin.

##### · on the eye: Strong caustic effect.

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## Safety Data Sheet

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**Trade name: KEIM MX Glaze Colour Base Coat (CURE)**

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- **during inhalation:**  
Vapours may cause drowsiness and dizziness.  
Irritating to respiratory system.
- **during swallowing:**  
Swallowing will lead to a caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.
- **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:  
Harmful  
Corrosive  
Irritant
- **Sensitisation** May cause sensitisation by skin contact.

### 12 Ecological information

- **Ecotoxicological effects:**
- **Aquatic toxicity:** Toxic to aquatic organisms.
- **Additional ecological information:**
- **General notes:**  
The product contains materials that are harmful to the environment.  
Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water  
Do not allow product to reach ground water, water course or sewage system, even in small quantities.  
Danger to drinking water if even extremely small quantities leak into the ground.

### 13 Disposal considerations

- **Product:**
- **Recommendation** Disposal must be made according to official regulations.

- **European waste catalogue**

08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances
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- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### 14 Transport information

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 3 Flammable liquids.
- **UN-Number:** 3469
- **Packaging group:** III

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## Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 01.12.2010

Revision: 01.12.2010

**Trade name: KEIM MX Glaze Colour Base Coat (CURE)**

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- **Hazard label:** 8
- **Special marking:** Symbol (fish and tree)
- **Description of goods:** 3469 PAINT, FLAMMABLE, CORROSIVE
- **Limited quantities (LQ)** LQ22
- **Transport category** 2
- **Tunnel restriction code** D/E

- **Maritime transport IMDG:**



- **IMDG Class:** 3
- **UN Number:** 3469
- **Label** 8
- **Packaging group:** III
- **EMS Number:** F-E,S-C
- **Marine pollutant:** Yes  
Symbol (fish and tree)
- **Proper shipping name:** PAINT, FLAMMABLE, CORROSIVE

- **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 3469
- **Label** 8
- **Packaging group:** III
- **Proper shipping name:** PAINT, FLAMMABLE, CORROSIVE

- **Environmental hazards:**  
Product contains environmentally hazardous substances: nonylphenol

### 15 Regulatory information

- **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:**  
C Corrosive  
N Dangerous for the environment
- **Hazard-determining components of labelling:**  
3-aminomethyl-3,5,5-trimethylcyclohexylamine
- **Risk phrases:**  
10 Flammable.  
20/21/22 Harmful by inhalation, in contact with skin and if swallowed.  
34 Causes burns.

(Contd. on page 8)

GB



## Safety Data Sheet

### according to 1907/2006/EC, Article 31

Printing date 01.12.2010

Revision: 01.12.2010

**Trade name: KEIM MX Glaze Colour Base Coat (CURE)**

(Contd. of page 7)

- 43 May cause sensitisation by skin contact.  
 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**· Safety phrases:**

- 16 Keep away from sources of ignition - No smoking.  
 23 Do not breathe fumes/aerosol.  
 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
 38 In case of insufficient ventilation, wear suitable respiratory equipment.  
 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**· Special labelling of certain preparations:**

Contains 3,6-diazaoctanethylenediamin, 3-aminomethyl-3,5,5-trimethylcyclohexylamine. May produce an allergic reaction.

## 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 R-phrases**

- 10 Flammable.  
 11 Highly flammable.  
 20 Harmful by inhalation.  
 20/22 Harmful by inhalation and if swallowed.  
 21 Harmful in contact with skin.  
 21/22 Harmful in contact with skin and if swallowed.  
 22 Harmful if swallowed.  
 34 Causes burns.  
 36/37 Irritating to eyes and respiratory system.  
 36/38 Irritating to eyes and skin.  
 37/38 Irritating to respiratory system and skin.  
 41 Risk of serious damage to eyes.  
 43 May cause sensitisation by skin contact.  
 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
 62 Possible risk of impaired fertility.  
 63 Possible risk of harm to the unborn child.  
 66 Repeated exposure may cause skin dryness or cracking.  
 67 Vapours may cause drowsiness and dizziness.

**· Department issuing MSDS:** Product safety department

**· Contact:** Mrs. Popescu

# Safety Data Sheet

according to 1907/2006/EC, Article 31



Printing date 02.12.2010

Revision: 02.12.2010

## 1 Identification of the substance/preparation and of the company/undertaking

- **Product details**
- **Trade name:** **KEIM MX Glaze Colour Base Coat (RESIN)**
- **Application of the substance / the preparation** Base coat
- **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](mailto:sales@keimpaints.co.uk)
- **Information in case of emergency:**  
 GBK Gefahrgut Büro GmbH  
 Emergency number: +49(0)6132/84463

## 2 Hazards identification

- **Hazard description:**  
 Xi Irritant  
 N Dangerous for the environment
- **Information concerning particular hazards for human and environment:**  
 R 10 Flammable.  
 R 36/38 Irritating to eyes and skin.  
 R 43 May cause sensitisation by skin contact.  
 R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
 Contains epoxy constituents. See information supplied by the manufacturer.
- **Classification system:**  
 The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

## 3 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 25068-38-6 NLP: 500-033-5	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700) Xi, N; R 36/38-43-51/53	50-60%
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(Contd. on page 2)



## Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 02.12.2010

Revision: 02.12.2010

**Trade name: KEIM MX Glaze Colour Base Coat (RESIN)**

(Contd. of page 1)

CAS: 64742-95-6 EINECS: 265-199-0	Solvent naphtha (petroleum), light arom. Xn, Xi, N; R 10-37-51/53-65	3-5%
CAS: 95-63-6 EINECS: 202-436-9	1,2,4-trimethylbenzene Xn, Xi, N; R 10-20-36/37/38-51/53	1-2%
CAS: 108-67-8 EINECS: 203-604-4	mesitylene Xi, N; R 10-37-51/53	< 0.5%
CAS: 98-82-8 EINECS: 202-704-5	cumene Xn, Xi, N; R 10-37-51/53-65	0.1-0.2%
CAS: 103-65-1 EINECS: 203-132-9	propylbenzene Xn, Xi, N; R 10-37-51/53-65	0.1-0.2%

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

### 4 First aid measures

· **General information:**

With appearance of symptoms or in cases of doubt seek medical advice .  
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 out mouth and then drink plenty of water.  
Do not induce vomiting; call for medical help immediately.

### 5 Fire-fighting measures

· **Suitable extinguishing agents:**

CO<sub>2</sub>, powder or water spray. Fight larger fire with alcohol resistant foam.

· **For safety reasons unsuitable extinguishing agents:** Water with full jet

· **Special hazards caused by the substance, its products of combustion or resulting gases:**

In case of fire, thick, black smoke develops. Inhalation of the dangerous decomposition products may cause serious health damages.

· **Protective equipment:**

Wear fully protective suit.  
Wear self-contained respiratory protective device.

· **Additional information**

Cool endangered receptacles with water spray.  
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.

GB

(Contd. on page 3)



## Safety Data Sheet

### according to 1907/2006/EC, Article 31

Printing date 02.12.2010

Revision: 02.12.2010

**Trade name: KEIM MX Glaze Colour Base Coat (RESIN)**

(Contd. of page 2)

### 6 Accidental release measures

- **Person-related safety precautions:**

- Avoid contact with skin and eyes.

- Ensure adequate ventilation

- Keep away from ignition sources.

- Do not inhale fumes.

- Wear protective equipment. Keep unprotected persons away.

- **Measures for environmental protection:**

- Do not allow product to reach soil, sewage system or any water course.

- Inform respective authorities in case of seepage into water course or sewage system.

- **Measures for cleaning/collecting:**

- Absorb with non-combustible liquid-binding material (sand, diatomite, vermiculite).

- Clear contaminated areas thoroughly.

- Clean with water, not with solvent.

- Ensure adequate ventilation.

- Dispose of the material collected according to regulations.

### 7 Handling and storage

- **Handling:**

- **Information for safe handling:**

- Avoid contact with skin and eyes.

- Ensure good ventilation/exhaustion at the workplace.

- 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:**

- Fumes can combine with air to form an explosive mixture.

- Cool endangered receptacles with water spray.

- Keep ignition sources away - Do not smoke.

- Protect against electrostatic charges.

- **Storage:**

- **Requirements to be met by storerooms and receptacles:**

- Keep container tightly closed. Do not empty container under pressure, non-pressure vessel

- ! Close opened containers carefully and store upright, to prevent any leakage.

- Store only in unopened original receptacles.

- **Information about storage in one common storage facility:**

- Store away from flammable substances.

- **Further information about storage conditions:**

- Store at temperatures between 5 °C and 35 °C.

- Protect from frost.

- Keep container tightly sealed.

- **Storage class: 3A**

### 8 Exposure controls/personal protection

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

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## Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 02.12.2010

Revision: 02.12.2010

**Trade name: KEIM MX Glaze Colour Base Coat (RESIN)**

(Contd. of page 3)

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

**95-63-6 1,2,4-trimethylbenzene**

WEL	Long-term value: 125 mg/m <sup>3</sup> , 25 ppm
ILV	

- **Additional information:** The lists valid during the making were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
  - 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.
  - Avoid contact with the eyes and skin.
  - Do not inhale aerosols.
- **Respiratory protection:** Suitable respiratory protective device recommended.
- **Protection of hands:** Protective gloves
- **Material of gloves**
  - suitable material e.g.:
  - PVA gloves
  - Neoprene gloves

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.
- **Eye protection:** Tightly sealed goggles
- **Body protection:**
  - Protective work clothing
  - After contact with skin wash thoroughly with water.

## 9 Physical and chemical properties

**· General Information**

<b>Form:</b>	Fluid
<b>Colour:</b>	According to product specification
<b>Odour:</b>	Characteristic

**· Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	Undetermined.

<b>· Flash point:</b>	43°C
-----------------------	------

<b>· Self-igniting:</b>	Product is not selfigniting.
-------------------------	------------------------------

<b>· Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
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**· Explosion limits:**

<b>Lower:</b>	0.7 Vol %
<b>Upper:</b>	8.0 Vol %

<b>· Density at 20°C:</b>	1.4 g/cm <sup>3</sup>
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(Contd. on page 5)

GB



## Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 02.12.2010

Revision: 02.12.2010

**Trade name: KEIM MX Glaze Colour Base Coat (RESIN)**

(Contd. of page 4)

- |  |  |
|--|--|
| <b>· Solubility in / Miscibility with water:</b> | Not miscible or difficult to mix.  |
| <b>· pH-value:</b>                               | Not applicable   |
| <b>· Additional information:</b>                 | * The values are for freshly produced material and may change with the time. |

### 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **Materials to be avoided:** flammable substances
- **Dangerous decomposition products:**  
No hazardous decomposition products if stored and handled as prescribed.

### 11 Toxicological information

- **Acute toxicity:**

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

**64742-95-6 Solvent naphtha (petroleum), light arom.**

Oral	LD50	>6800 mg/kg (rat)
Dermal	LD50	>3400 mg/kg (rab)
Inhalative	LC50/4 h	>10.2 mg/l (rat)

**95-63-6 1,2,4-trimethylbenzene**

Oral	LD50	5000 mg/kg (rat)
------	------	------------------

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **during inhalation:** Irritating to respiratory system.
- **during swallowing:** Irritant effect possible
- **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.

### 12 Ecological information

- **Ecotoxicological effects:**
- **Aquatic toxicity:** Toxic to aquatic organisms.
- **Additional ecological information:**
- **General notes:**  
The product contains materials that are harmful to the environment.  
Do not allow product to reach ground water, water course or sewage system.

(Contd. on page 6)

GB



## Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 02.12.2010

Revision: 02.12.2010

**Trade name: KEIM MX Glaze Colour Base Coat (RESIN)**

(Contd. of page 5)

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

### 13 Disposal considerations

- **Product:**
- **Recommendation** Disposal must be made according to official regulations.

- **European waste catalogue**

08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances
-----------	---

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

### 14 Transport information

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 3 Flammable liquids.
- **Danger code (Kemler):** 90
- **UN-Number:** 1263
- **Packaging group:** III
- **Hazard label:** 9
- **Special marking:** Symbol (fish and tree)
- **Description of goods:** 1263 PAINT
- **Limited quantities (LQ)** LQ7
- **Transport category** 3
- **Tunnel restriction code** E

- **Maritime transport IMDG:**



- **IMDG Class:** 3
- **UN Number:** 1263
- **Label** 9
- **Packaging group:** III
- **EMS Number:** F-A,S-F
- **Marine pollutant:** Yes
- **Proper shipping name:** PAINT

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## Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 02.12.2010

Revision: 02.12.2010

**Trade name: KEIM MX Glaze Colour Base Coat (RESIN)**

(Contd. of page 6)

· **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1263
- **Label** 9
- **Packaging group:** III
- **Proper shipping name:** PAINT

· **Environmental hazards:**

Product contains environmentally hazardous substances: reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)

### 15 Regulatory information

· **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  
N Dangerous for the environment

· **Hazard-determining components of labelling:**

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)

· **Risk phrases:**

10 Flammable.  
36/38 Irritating to eyes and skin.  
43 May cause sensitisation by skin contact.  
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **Safety phrases:**

23 Do not breathe fumes/aerosol.  
24 Avoid contact with skin.  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
37 Wear suitable gloves.  
38 In case of insufficient ventilation, wear suitable respiratory equipment.  
46 If swallowed, seek medical advice immediately and show this container or label.  
61 Avoid release to the environment. Refer to special instructions/safety data sheets.

· **Special labelling of certain preparations:**

Contains epoxy constituents. See information supplied by the manufacturer.

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GB

# Safety Data Sheet

according to 1907/2006/EC, Article 31



Printing date 02.12.2010

Revision: 02.12.2010

**Trade name: KEIM MX Glaze Colour Base Coat (RESIN)**

(Contd. of page 7)

**· National regulations:****· Other regulations, limitations and prohibitive regulations**

The provisions of the Health and Safety at Work Act, the Control of Substances Hazardous to Health Regulations and The Dangerous Substances and Explosive Atmospheres Regulations apply to the use of this product at work.

**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 R-phrases**

- 10 Flammable.
- 20 Harmful by inhalation.
- 36/37/38 Irritating to eyes, respiratory system and skin.
- 36/38 Irritating to eyes and skin.
- 37 Irritating to respiratory system.
- 43 May cause sensitisation by skin contact.
- 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 65 Harmful: may cause lung damage if swallowed.

**· Department issuing MSDS:** Product safety department**· Contact:** Mrs. Popescu

GB

# Safety Data Sheet

according to 1907/2006/EC, Article 31



Printing date 07.12.2010

Revision: 07.12.2010

## 1 Identification of the substance/preparation and of the company/undertaking

- **Product details**
- **Trade name:** KEIM MX Glaze Thinner
- **Application of the substance / the preparation** Thinner, Diluent
- **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](mailto:sales@keimpaints.co.uk)
- **Information in case of emergency:**  
 GBK Gefahrgut Büro GmbH  
 Emergency number: +49(0)6132/84463

## 2 Hazards identification

- **Information concerning particular hazards for human and environment:**  
 Has a narcotizing effect.  
 R 10 Flammable.  
 R 66 Repeated exposure may cause skin dryness or cracking.  
 R 67 Vapours may cause drowsiness and dizziness.
- **Classification system:**  
 The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

## 3 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 123-86-4	n-butyl acetate	R 10-66-67	90-100%
EINECS: 204-658-1			

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

## 4 First aid measures

- **General information:**  
 With appearance of symptoms or in cases of doubt seek medical advice .  
 When seeing the doctor we suggest to present this safety data sheet.

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## Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 07.12.2010

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**Trade name: KEIM MX Glaze Thinner**

(Contd. of page 1)

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **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 out mouth and then drink plenty of water.  
Do not induce vomiting; call for medical help immediately.

### 5 Fire-fighting measures

- **Suitable extinguishing agents:** CO<sub>2</sub>, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards caused by the substance, its products of combustion or resulting gases:**  
In case of fire, thick, black smoke develops. Inhalation of the dangerous decomposition products may cause serious health damages.  
In case of fire, the following can be released:  
carbon oxide (CO<sub>x</sub>)
- **Protective equipment:**  
Wear fully protective suit.  
Wear self-contained respiratory protective device.
- **Additional information**  
Cool endangered receptacles with water spray.  
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.

### 6 Accidental release measures

- **Person-related safety precautions:**  
Avoid contact with skin and eyes.  
Ensure adequate ventilation  
Keep away from ignition sources.  
Do not inhale fumes.  
Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**  
Do not allow product to reach soil, sewage system or any water course.
- **Measures for cleaning/collecting:**  
Absorb with non-combustible liquid-binding material (sand, diatomite, vermiculite).  
Ensure adequate ventilation.  
Dispose of the material collected according to regulations.  
Clear contaminated areas thoroughly.

### 7 Handling and storage

- **Handling:**
- **Information for safe handling:**  
Avoid contact with skin and eyes.

(Contd. on page 3)



## Safety Data Sheet

### according to 1907/2006/EC, Article 31

Printing date 07.12.2010

Revision: 07.12.2010

**Trade name: KEIM MX Glaze Thinner**

(Contd. of page 2)

- Ensure good ventilation/exhaustion at the workplace.
- 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:**
  - Fumes can combine with air to form an explosive mixture.
  - Cool endangered receptacles with water spray.
  - Keep ignition sources away - Do not smoke.
  - Protect against electrostatic charges.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
  - Keep container tightly closed . Do not empty container under pressure, non-pressure vessel
  - ! Close opened containers carefully and store upright, to prevent any leakage.
  - Store only in unopened original receptacles.
- **Information about storage in one common storage facility:**
  - Store away from flammable substances.
- **Further information about storage conditions:**
  - Store at temperatures between 5 °C and 35 °C.
  - Protect from frost.
  - Protect from heat and direct sunlight.
  - Keep container tightly sealed.
- **Storage class:** 3A

## 8 Exposure controls/personal protection

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

- **Ingredients with limit values that require monitoring at the workplace:**

### 123-86-4 n-butyl acetate

WEL	Short-term value: 966 mg/m <sup>3</sup> , 200 ppm
	Long-term value: 724 mg/m <sup>3</sup> , 150 ppm

- **Additional information:** The lists valid during the making were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
  - Wash hands before breaks and at the end of work.
  - Do not inhale gases / fumes / aerosols.
  - Avoid contact with the eyes and skin.
- **Respiratory protection:** Suitable respiratory protective device recommended.
- **Protection of hands:** Protective gloves
- **Material of gloves**
  - suitable material e.g.:
  - PVA gloves
  - Neoprene gloves

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.
- **Eye protection:** Tightly sealed goggles
- **Body protection:**
  - Protective work clothing

(Contd. on page 4)

GB



## Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 07.12.2010

Revision: 07.12.2010

Trade name: KEIM MX Glaze Thinner

(Contd. of page 3)

After contact with skin wash thoroughly with water.

### 9 Physical and chemical properties

#### · General Information

<b>Form:</b>	Fluid
<b>Colour:</b>	According to product specification
<b>Odour:</b>	Characteristic

#### · Change in condition

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	124°C

<b>· Flash point:</b>	27°C
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<b>· Ignition temperature:</b>	370°C
--------------------------------	-------

<b>· Self-igniting:</b>	Product is not selfigniting.
-------------------------	------------------------------

<b>· Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
-------------------------------	---

#### · Explosion limits:

<b>Lower:</b>	1.7 Vol %
<b>Upper:</b>	7.6 Vol %

<b>· Vapour pressure at 20°C:</b>	10 mm Hg
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<b>· Density at 20°C:</b>	0.9* g/cm <sup>3</sup> (ISO 2811)
---------------------------	-----------------------------------

<b>· Vapour density at 20°C</b>	> air
---------------------------------	-------

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

Insoluble.

<b>· pH-value:</b>	Not applicable
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#### · Viscosity:

<b>Kinematic at 20°C:</b>	30 s (ISO 2431 (6 mm))
---------------------------	------------------------

<b>· Additional information:</b>	* The values are for freshly produced material and may change with the time.
----------------------------------	--

### 10 Stability and reactivity

#### · Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

#### · Materials to be avoided:

flammable substances

#### · Dangerous reactions

No dangerous reactions known.

#### · Dangerous decomposition products:

No hazardous decomposition products if stored and handled as prescribed.

GB

(Contd. on page 5)



## Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 07.12.2010

Revision: 07.12.2010

Trade name: KEIM MX Glaze Thinner

(Contd. of page 4)

### 11 Toxicological information

- **Acute toxicity:**
- **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 inhalation:**  
Vapours may cause drowsiness and dizziness.  
Irritating to respiratory system.
- **during swallowing:** Irritant effect possible
- **Sensitization:** No sensitizing effects known.
- **Other information (about experimental toxicology):**  
Experimental analysis are not available.

### 12 Ecological information

- **Additional ecological information:**
- **According to the formulation contains the following heavy metals and compounds from the EU guideline NO. 76/464 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:**  
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

### 13 Disposal considerations

- **Product:**
  - **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**
- |           |   |
|-----------|---|
| 08 01 11* | waste paint and varnish containing organic solvents or other dangerous substances |
|-----------|---|
- **Uncleaned packaging:**
  - **Recommendation:** Disposal must be made according to official regulations.
  - **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### 14 Transport information

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 3 Flammable liquids.

(Contd. on page 6)

GB



## Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 07.12.2010

Revision: 07.12.2010

Trade name: KEIM MX Glaze Thinner

(Contd. of page 5)

- **Danger code (Kemler):** 30
- **UN-Number:** 1263
- **Packaging group:** III
- **Hazard label:** 3
- **Description of goods:** 1263 PAINT RELATED MATERIAL, mixture, special provision 640E
- **Limited quantities (LQ)** LQ7
- **Transport category** 3
- **Tunnel restriction code** D/E

- **Maritime transport IMDG:**



- **IMDG Class:** 3
- **UN Number:** 1263
- **Label** 3
- **Packaging group:** III
- **EMS Number:** F-E,S-D
- **Proper shipping name:** PAINT RELATED MATERIAL, mixture

- **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1263
- **Label** 3
- **Packaging group:** III
- **Proper shipping name:** PAINT RELATED MATERIAL, mixture

### 15 Regulatory information

- **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

- **Risk phrases:**

10 Flammable.  
66 Repeated exposure may cause skin dryness or cracking.  
67 Vapours may cause drowsiness and dizziness.

- **Safety phrases:**

23 Do not breathe fumes/aerosol.  
24/25 Avoid contact with skin and eyes.  
38 In case of insufficient ventilation, wear suitable respiratory equipment.  
43 In case of fire, use sand, carbon dioxide or powdered extinguishing agent. Never use water.

(Contd. on page 7)



**Safety Data Sheet**  
according to 1907/2006/EC, Article 31

Printing date 07.12.2010

Revision: 07.12.2010

**Trade name: KEIM MX Glaze Thinner**

46 If swallowed, seek medical advice immediately and show this container or label.

(Contd. of page 6)

**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 R-phrases**

10 Flammable.

66 Repeated exposure may cause skin dryness or cracking.

67 Vapours may cause drowsiness and dizziness.

· **Department issuing MSDS:** Product safety department

· **Contact:** Mrs. Popescu

GB



## Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 08.12.2010

Revision: 02.12.2010

### 1 Identification of the substance/preparation and of the company/undertaking

- **Product details**
- **Trade name: KEIM MX Glaze Colour (CURE)**
- **Application of the substance / the preparation** Paint
- **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](mailto:sales@keimpaints.co.uk)
- **Information in case of emergency:**  
 GBK Gefahrgut Büro GmbH  
 Emergency number: +49(0)6132/84463

### 2 Hazards identification

- **Hazard description:**  
C Corrosive
- **Information concerning particular hazards for human and environment:**  
 R 21/22 Harmful in contact with skin and if swallowed.  
 R 34 Causes burns.
- **Classification system:**  
 The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

### 3 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 919-30-2 EINECS: 213-048-4	3-aminopropyltriethoxysilane C, Xn; R 22-34	60-70%
CAS: 13822-56-5 EINECS: 237-511-5	3-(trimethoxysilyl)propylamine Xi; R 36/38	25-30%
CAS: 22673-19-4	Dibutylbis(Pentane-2,4-Dionato-o,o')Tin Xn, Xi; R 21-36/38-48/22-52/53	5-7%

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

GB

(Contd. on page 2)



## Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 08.12.2010

Revision: 02.12.2010

**Trade name: KEIM MX Glaze Colour (CURE)**

(Contd. of page 1)

### 4 First aid measures

- **General information:**  
With appearance of symptoms or in cases of doubt seek medical advice .  
Immediately remove any clothing soiled by the product.  
When seeing the doctor we suggest to present this safety data sheet.
- **After inhalation:**  
Supply fresh air; consult doctor in case of complaints.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**  
Immediately wash with water and soap and rinse thoroughly.  
Seek medical treatment.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**  
Rinse out mouth and then drink plenty of water.  
Call for a doctor immediately.  
Do not induce vomiting.

### 5 Fire-fighting measures

- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fire with alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards caused by the substance, its products of combustion or resulting gases:**  
In case of fire, thick, black smoke develops. Inhalation of the dangerous decomposition products may cause serious health damages.
- **Protective equipment:**  
Wear fully protective suit.  
Wear self-contained respiratory protective device.
- **Additional information**  
Cool endangered receptacles with water spray.  
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.

### 6 Accidental release measures

- **Person-related safety precautions:**  
Avoid contact with skin and eyes.  
Ensure adequate ventilation  
Do not inhale fumes.  
Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**  
Do not allow product to reach soil, sewage system or any water course.
- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralizing agent.  
Ensure adequate ventilation.  
Dispose of the material collected according to regulations.

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Clear contaminated areas thoroughly.

### 7 Handling and storage

- **Handling:**
- **Information for safe handling:**  
 Avoid contact with skin and eyes.  
 Ensure good ventilation/exhaustion at the workplace.  
 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:**  
 Cool endangered receptacles with water spray.
- **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:**  
 Do not store together with alkalis (caustic solutions).
- **Further information about storage conditions:**  
 Protect from frost.  
 Protect from heat and direct sunlight.  
 Keep container tightly sealed.  
 Store at temperatures between 5 °C and 35 °C.
- **Storage class:** 8B

### 8 Exposure controls/personal protection

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

- **Ingredients with limit values that require monitoring at the workplace:**

**22673-19-4 Dibutylbis(Pentane-2,4-Dionato-o,o')Tin**

OEL	Short-term value: 0.1 mg/m <sup>3</sup> Long-term value: 0.2 mg/m <sup>3</sup>
	Sn

- **Additional information:** The lists valid during the making were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
 Keep away from foodstuffs, beverages and feed.  
 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:** Suitable respiratory protective device recommended.
- **Protection of hands:** Protective gloves
- **Material of gloves**  
 suitable material e.g.:  
 Nitrile rubber, NBR  
 Natural rubber, NR

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Neoprene gloves

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.

- **Eye protection:**

if applicable face protection

Tightly sealed goggles

- **Body protection:**

Impervious protective clothing

After contact with skin wash thoroughly with water.

### 9 Physical and chemical properties

- **General Information**

<b>Form:</b>	Fluid
<b>Colour:</b>	According to product specification
<b>Odour:</b>	Characteristic

- **Change in condition**

**Melting point/Melting range:** Undetermined.**Boiling point/Boiling range:** Undetermined.

- **Flash point:**

96°C

- **Self-igniting:**

Product is not selfigniting.

- **Danger of explosion:**

Product does not present an explosion hazard.

- **Density at 20°C:**

1.0\* g/cm<sup>3</sup>

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

Not miscible or difficult to mix.

- **pH-value:**

Not applicable

- **Viscosity:**

**Kinematic at 20°C:** < 30\* s (ISO 2431 (6mm))

- **Additional information:**

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

### 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

- **Materials to be avoided:**

- **Dangerous reactions** Develops corrosive gases/fumes.

- **Dangerous decomposition products:**

No hazardous decomposition products if stored and handled as prescribed.

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### 11 Toxicological information

- **Acute toxicity:**

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

**919-30-2 3-aminopropyltriethoxysilane**

Oral	LD50	1780 mg/kg (rat)
Dermal	LD50	4000 mg/kg (rabbit)

- **Primary irritant effect:**

- **on the skin:** Caustic effect on skin and mucous membranes.

- **on the eye:** Strong caustic effect.

- **during inhalation:** Irritating to respiratory system.

- **during swallowing:**

Swallowing will lead to a caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

- **Sensitization:** No sensitizing effects known.

- **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:

Harmful

Corrosive

### 12 Ecological information

- **Additional ecological information:**

- **AOX-indication:**

According to our standard of knowledge the product does not contain any organic bounded halogen.

The product has no influence on the waste water's AOX-value.

- **General notes:**

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

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

### 13 Disposal considerations

- **Product:**

- **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**

08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances
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- **Uncleaned packaging:**

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

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

### 14 Transport information

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 8 Corrosive substances.
- **Danger code (Kemler):** 80
- **UN-Number:** 1760
- **Packaging group:** III
- **Hazard label:** 8
- **Description of goods:** 1760 CORROSIVE LIQUID, N.O.S. (Siloxane Compound)
- **Limited quantities (LQ)** LQ7
- **Transport category** 3
- **Tunnel restriction code** E

- **Maritime transport IMDG:**



- **IMDG Class:** 8
- **UN Number:** 1760
- **Label** 8
- **Packaging group:** III
- **EMS Number:** F-A,S-B
- **Proper shipping name:** CORROSIVE LIQUID, N.O.S. (Siloxane Compound)

- **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 8
- **UN/ID Number:** 1760
- **Label** 8
- **Packaging group:** III
- **Proper shipping name:** CORROSIVE LIQUID, N.O.S. (Siloxane Compound)

### 15 Regulatory information

- **Labelling according to EU guidelines:**  
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

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- **Code letter and hazard designation of product:**  
C Corrosive
- **Hazard-determining components of labelling:**  
3-aminopropyltriethoxysilane
- **Risk phrases:**  
21/22 Harmful in contact with skin and if swallowed.  
34 Causes burns.
- **Safety phrases:**  
23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
38 In case of insufficient ventilation, wear suitable respiratory equipment.  
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

### 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 R-phrases**  
21 Harmful in contact with skin.  
22 Harmful if swallowed.  
34 Causes burns.  
36/38 Irritating to eyes and skin.  
48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.  
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Department issuing MSDS:** Product safety department
- **Contact:** Mrs. Popescu

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