



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

Printing date 06.03.2017

Version number 2


Revision: 06.03.2017

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

- **1.1 Product identifier**
- **Trade name: KEIM MX GLAZE CLEAR (RESIN)**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the mixture** Glazing
- **Uses advised against** Not suitable for use in do-it-yourself applications.
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
KEIM MINERAL PAINTS LTD  
Santok Building / Deer Park Way, Donnington Wood GB-Telford, Shropshire TF2 7NA  
Tel +44 1952 231 250 / Fax +44 1952 231 251  
www.keim.com / sales@keimpaints.co.uk
- **Further information obtainable from:**  
David Pratt  
Telefon: +44 1952 231250  
E-Mail: sales@keimpaints.co.uk
- **1.4 Emergency telephone number:**  
GBK GmbH Global Regulatory Compliance  
Emergency number: +49(0)6132/84463

### SECTION 2: Hazards identification

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

Acute Tox. 4	H302 Harmful if swallowed.
Skin Irrit. 2	H315 Causes skin irritation.
Eye Irrit. 2	H319 Causes serious eye irritation.
Skin Sens. 1	H317 May cause an allergic skin reaction.
Aquatic Chronic 3	H412 Harmful to aquatic life with long lasting effects.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**  
  
GHS07
- **Signal word** Warning
- **Hazard-determining components of labelling:**  
Proprietary silicone  
4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane

(Contd. on page 2)



## Safety data sheet

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

Printing date 06.03.2017

Version number 2

Revision: 06.03.2017

**Trade name: KEIM MX GLAZE CLEAR (RESIN)**

(Contd. of page 1)

poly(oxy-1,2-ethanediyl),  $\alpha$ -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]- $\omega$ -hydroxy-

poly(oxy-1,2-ethanediyl),  $\alpha$ -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]- $\omega$ -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]-

**Hazard statements**

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements**

P261 Avoid breathing vapors.

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

P273 Avoid release to the environment.

P301+P310 IF SWALLOWED: Immediately call a doctor.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P315 Get immediate medical advice/attention.

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

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

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

**2.3 Other hazards****Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

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

Description: Mixture of substances listed below with nonhazardous additions.

**Dangerous components:**

	Proprietary silicone ☠ Acute Tox. 4, H302	50-100%
CAS: 30583-72-3 NLP: 500-070-7	4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane ☠ Aquatic Chronic 2, H411; ☠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	10-20%
CAS: 104810-48-2	poly(oxy-1,2-ethanediyl), $\alpha$ -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]- $\omega$ -hydroxy- ☠ Aquatic Chronic 2, H411; ☠ Skin Sens. 1, H317	≤ 2.5%
CAS: 104810-47-1	poly(oxy-1,2-ethanediyl), $\alpha$ -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]- $\omega$ -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]- ☠ Aquatic Chronic 2, H411; ☠ Skin Sens. 1, H317	≤ 2.5%

(Contd. on page 3)



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

Printing date 06.03.2017

Version number 2

Revision: 06.03.2017

**Trade name: KEIM MX GLAZE CLEAR (RESIN)**

(Contd. of page 2)

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

### SECTION 4: First aid measures

#### · 4.1 Description of first aid measures

##### · **General information:**

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.

Do not use solvents or thinners.

If skin irritation continues, consult a doctor.

##### · **After eye contact:**

Rinse opened eye for several minutes under running water. Then consult a doctor.

##### · **After swallowing:**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

#### · **4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

#### · **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### SECTION 5: Firefighting measures

#### · 5.1 Extinguishing media

##### · **Suitable extinguishing agents:**

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

#### · **5.2 Special hazards arising from the substance or mixture**

In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

In case of fire, the following can be released:

carbon oxide (CO<sub>x</sub>)

Nitrogen oxides (NO<sub>x</sub>)

halogenated compounds

metal oxide

#### · **5.3 Advice for firefighters**

##### · **Protective equipment:**

Wear fully protective suit.

Wear self-contained respiratory protective device.

##### · **Additional information**

Cool endangered receptacles with water spray.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

(Contd. on page 4)



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

Printing date 06.03.2017

Version number 2

Revision: 06.03.2017

**Trade name: KEIM MX GLAZE CLEAR (RESIN)**

(Contd. of page 3)

### SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**

Avoid contact with skin and eyes.

Ensure adequate ventilation

Do not inhale fumes.

Wear protective equipment. Keep unprotected persons away.

· **6.2 Environmental precautions:**

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.

· **6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of the material collected according to regulations.

Clear contaminated areas thoroughly.

Ensure adequate ventilation.

· **6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**

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.

· **7.2 Conditions for safe storage, including any incompatibilities**

· **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.

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 0 °C and 35 °C.

Protect from heat and direct sunlight.

Protect from frost.

· **Storage class: 12**

(Contd. on page 5)



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

Printing date 06.03.2017

Version number 2

Revision: 06.03.2017

**Trade name: KEIM MX GLAZE CLEAR (RESIN)**

(Contd. of page 4)

- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**

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

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

- **DNELs** Not available

- **PNECs** Not available

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

- **8.2 Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

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.:

Butyl rubber, BR

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

- **Eye protection:** Tightly sealed goggles

- **Body protection:**

Protective work clothing

After contact with skin wash thoroughly with water and apply lotion.

- **Limitation and supervision of exposure into the environment** See Section 12 and 6.2

### SECTION 9: Physical and chemical properties

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

- **General Information**

- **Appearance:**

**Form:** Fluid

**Colour:** Clear

- **Odour:** Aromatic

- **Odour threshold:** Not determined.

- **pH-value:** Not applicable

(Contd. on page 6)



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.03.2017

Version number 2

Revision: 06.03.2017

**Trade name: KEIM MX GLAZE CLEAR (RESIN)**

(Contd. of page 5)

· <b>Change in condition</b> <b>Melting point/freezing point:</b>	Undetermined.
<b>Initial boiling point and boiling range:</b>	> 37.78 °C
· <b>Flash point:</b>	Not applicable.
· <b>Flammability (solid, gas):</b>	Not applicable.
· <b>Ignition temperature:</b>	Not determined.
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto-ignition temperature:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b> <b>Lower:</b>	0.89 Vol %
<b>Upper:</b>	2.2 Vol %
· <b>Vapour pressure:</b>	Not determined.
· <b>Density:</b>	Not determined.
· <b>Relative density</b>	1.14*
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with water:</b>	Insoluble.
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b> <b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>9.2 Other information</b>	* The values are for freshly produced material and may change with the time.

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**  
No hazardous decomposition products if stored and handled as prescribed.

GB

(Contd. on page 7)



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.03.2017

Version number 2

Revision: 06.03.2017

**Trade name: KEIM MX GLAZE CLEAR (RESIN)**

(Contd. of page 6)

### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

##### Acute toxicity

Harmful if swallowed.

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

	ATE mix	668 mg/kg (orally)
--	---------	--------------------

##### 104810-48-2 poly(oxy-1,2-ethanediyl), $\alpha$ -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]- $\omega$ -hydroxy-

Inhalative	LC50/4 h	5.8 mg/l (rat)
------------	----------	----------------

##### Primary irritant effect:

##### Skin corrosion/irritation

Causes skin irritation.

##### Serious eye damage/irritation

Causes serious eye irritation.

##### during inhalation:

Irritant effect possible.

Exposure to decomposition products may cause a health hazard.

##### during swallowing:

 Harmful if swallowed. Irritating to mouth, throat and stomach.

##### Respiratory or skin sensitisation

Contains

4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane,  $\alpha$ -[3-[3-(2Hbenzotriazol-2-yl) derivatives,  $\omega$ -[3-[3-(2H-benzotriazol-2-yl) derivatives. May cause an allergic skin reaction.

##### Other information (about experimental toxicology):

Experimental analysis are not available.

The product was not tested. The statements on toxicology have been derived from the properties of the individual components.

##### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) not applicable

##### Germ cell mutagenicity

 Based on available data, the classification criteria are not met.

##### Carcinogenicity

 Based on available data, the classification criteria are not met.

##### Reproductive toxicity

 Based on available data, the classification criteria are not met.

##### STOT-single exposure

 Based on available data, the classification criteria are not met.

##### STOT-repeated exposure

 Based on available data, the classification criteria are not met.

##### Aspiration hazard

 Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

#### 12.1 Toxicity

##### Aquatic toxicity:

 Harmful to aquatic organisms.

##### 12.2 Persistence and degradability

 No further relevant information available.

##### 12.3 Bioaccumulative potential

 No further relevant information available.

##### 12.4 Mobility in soil

 No further relevant information available.

(Contd. on page 8)



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

Printing date 06.03.2017

Version number 2

Revision: 06.03.2017

**Trade name: KEIM MX GLAZE CLEAR (RESIN)**

(Contd. of page 7)

- **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
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
Must not be disposed 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 hazardous substances
-----------	---
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary with cleansing agents.

### SECTION 14: Transport information

- |  |   |
|--|---|
| · <b>14.1 UN-Number</b><br>· <b>ADR, IMDG, IATA</b>                                    | Void  |
| · <b>14.2 UN proper shipping name</b><br>· <b>ADR, IMDG, IATA</b>                      | Void  |
| · <b>14.3 Transport hazard class(es)</b><br>· <b>ADR, IMDG, IATA</b><br>· <b>Class</b> | Void  |
| · <b>14.4 Packing group</b><br>· <b>ADR, IMDG, IATA</b>                                | Void  |
| · <b>14.5 Environmental hazards:</b>   | Not applicable.   |
| · <b>14.6 Special precautions for user</b>   | Not applicable.   |
| · <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>       | Not applicable.   |
| · <b>Transport/Additional information:</b>   | No dangerous good in sense of these transport regulations.<br>The product is only regulated as a dangerous good |

(Contd. on page 9)





## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.03.2017

Version number 2

Revision: 06.03.2017

**Trade name: KEIM MX GLAZE CLEAR (RESIN)**

(Contd. of page 8)

when transported in tank vessels.

ADN : UN 9006 /ENVIRONMENTALLY  
HAZARDOUS SUBSTANCE, LIQUID, N.O.S./ Class  
9/ Packing group -/ Environmental hazards YES/  
Marine pollutant substances Not applicable.· **UN "Model Regulation":** Void

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**  
For information on labelling please refer to section 2 of this document.
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **National regulations:**
- **Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.
- **Other regulations, limitations and prohibitive regulations**
- **Substances of very high concern (SVHC) according to REACH, Article 57** not applicable
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

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

- **Relevant phrases**  
H302 Harmful if swallowed.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H411 Toxic to aquatic life with long lasting effects.
- **Department issuing SDS:** KEIMFARBEN Germany, Product safety department
- **Abbreviations and acronyms:**  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
TRGS: Technische Regeln für Gefahrstoffe (Technical Rules for Dangerous Substances, BAuA, Germany)  
VOC: Volatile Organic Compounds (USA, EU)  
DNEL: Derived No-Effect Level (REACH)  
PNEC: Predicted No-Effect Concentration (REACH)

(Contd. on page 10)



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

Printing date 06.03.2017

Version number 2

Revision: 06.03.2017

**Trade name: KEIM MX GLAZE CLEAR (RESIN)**

(Contd. of page 9)

LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
SVHC: Substances of Very High Concern  
vPvB: very Persistent and very Bioaccumulative  
EC10: Effective concentration at 10% mortality rate.  
EC50: Half maximal effective concentration.  
LC10: Lethal concentration at 10% mortality rate.  
NOEC: No observed effect concentration.  
REACH: Registration, Evaluation and Authorisation of Chemicals (Regulation (EC) No.1907/2006)  
Acute Tox. 4: Acute toxicity – Category 4  
Skin Irrit. 2: Skin corrosion/irritation – Category 2  
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2  
Skin Sens. 1: Skin sensitisation – Category 1  
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2  
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3  
\* **Data compared to the previous version altered.**

GB