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1 Identification

· Product identifier

· Trade name: K-Poxy Epoxy Terrazzo Resin Part B

· Article number: KR-108 5-RC-B

· Recommended use and restriction on use

· Recommended use: Coating material

· Restrictions on use: No further relevant information available.

· Details of the supplier of the Safety Data Sheet

· Manufacturer/Supplier:

Klein and Company, Inc. 165-167 Hickory Springs Industrial Drive Canton, GA 30115 (800)241-0681

· Emergency telephone number:

ChemTel Inc.

(800)255-3924, +1 (813)248-0585

2 Hazard(s) identification

· Classification of the substance or mixture



GHS05 Corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.



Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H312 Harmful in contact with skin.

Skin Sens. 1 H317 May cause an allergic skin reaction.

· Additional information:

There are no other hazards not otherwise classified that have been identified.

0 percent of the mixture consists of ingredient(s) of unknown toxicity.

- · Label elements
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms





GHS05 GHS07

- · Signal word Danger
- · Hazard-determining components of labeling:

3,6,9-triazaundecamethylenediamine

3,6-diazaoctanethylenediamin

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Polyetheramine

Hazard statements

H302+H312 Harmful if swallowed or in contact with skin. Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

· Precautionary statements

P260 Do not breathe dusts or mists.

P280 Wear protective gloves/protective clothing/eye protection.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse

skin with water/shower.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for P304+P340

breathing.

P312 Call a poison center/doctor if you feel unwell. P363 Wash contaminated clothing before reuse.

P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.

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

regulations.

· Hazard description:

WHMIS-symbols:

D2B - Toxic material causing other toxic effects

E - Corrosive material



- · Classification system:
- NFPA ratings (scale 0 4)



Health = 3Fire = 1

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



3 Health = 3

1 Fire = 1

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.

· vPvB: Not applicable.

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3 Composition/information on ingredients

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

· Dangerous components:	
112-57-2 3,6,9-triazaundecamethylenediamine Skin Corr. 1B, H314 Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317	35-65%
107-41-5 2-methylpentane-2,4-diol Skin Irrit. 2, H315; Eye Irrit. 2, H319 Flam. Liq. 4, H227	20-30%
112-24-3 3,6-diazaoctanethylenediamin Skin Corr. 1B, H314 Acute Tox. 4, H312; Skin Sens. 1, H317	5-15%
9046-10-0 Polyetheramine	5-15%

Additional information:

For the listed ingredients, the identity and exact percentages are being withheld as a trade secret.

4 First-aid measures

- · Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation:

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 rinse with water.

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

Seek immediate medical help for blistering or open wounds.

· After eye contact:

Remove contact lenses if worn, if possible.

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; immediately call for medical help.

Information for doctor:

· Most important symptoms and effects, both acute and delayed

Allergic reactions

Caustic effect on skin and mucous membranes.

Coughing

Dizziness

Nausea

Gastric or intestinal disorders when ingested.

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Profuse sweating

· Danger

Danger of disturbed cardiac rhythm.

Danger of gastric perforation.

Causes serious eye damage.

Harmful if swallowed.

Harmful in contact with skin.

May be harmful if inhaled.

· Indication of any immediate medical attention and special treatment needed

Medical supervision for at least 48 hours.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

Foam

Gaseous extinguishing agents

Water fog / haze

Carbon dioxide

Fire-extinguishing powder

· For safety reasons unsuitable extinguishing agents:

Water spray

Water stream.

· Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

- Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information

Use large quantities of foam as it is partially destroyed by the product.

Cool endangered receptacles with water fog.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

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

Methods and material for containment and cleaning up:

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

Dispose contaminated material as waste according to item 13.

Send for recovery or disposal in suitable receptacles.

Reference to other sections

See Section 7 for information on safe handling.

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See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Prevent formation of aerosols.

Avoid splashes or spray in enclosed areas.

Use only in well ventilated areas.

- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Avoid storage near extreme heat, ignition sources or open flame.

Information about storage in one common storage facility:

Store away from foodstuffs.

Do not store together with acids.

Store away from oxidizing agents.

Store away from metals.

· Further information about storage conditions:

Keep receptacle tightly sealed.

Protect from humidity and water.

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters

	Control parameters		
· Components w	rith limit values that require monitoring at the workplace:		
112-57-2 3,6,9-1	triazaundecamethylenediamine		
WEEL (USA)	Long-term value: 5 mg/m³ Skin; DSEN		
107-41-5 2-met	hylpentane-2,4-diol		
REL (USA)	Ceiling limit value: 125 mg/m³, 25 ppm		
TLV (USA)	Ceiling limit value: 121 mg/m³, 25 ppm		
EL (Canada)	Ceiling limit value: 25 ppm		
EV (Canada)	Ceiling limit value: 120 mg/m³, 25 ppm		
LMPE (Mexico)	Ceiling limit value: 25 ppm		
112-24-3 3,6-dia	112-24-3 3,6-diazaoctanethylenediamin		
WEEL (USA)	Long-term value: 6 mg/m³, 1 ppm Skin		
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EV (Canada) Long-term value: 3 mg/m³, 0.5 ppm

Skin

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

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.

- Engineering controls: No further relevant information available.
- · Breathing equipment:

Use suitable respiratory protective device when aerosol or mist is formed.

Use suitable respiratory protective device when high concentrations are present.

NIOSH or EN approved organic vapor respirator equipped with a dust/mist prefilter should be used.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of 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.

Penetration time of glove material

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

· Eve protection:

Contact lenses should not be worn.



Safety glasses

- · Body protection: Protective work clothing
- Limitation and supervision of exposure into the environment

No further relevant information available.

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9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Liquid

Color: According to product specification

Odor: Amine-like
Odor threshold: Not determined.

pH-value: Not determined.

· Change in condition

Melting point/Melting range:
Boiling point/Boiling range:

'Flash point:

Undetermined.
> 199 °C (> 390 °F)

> 94 °C (> 201 °F)

· Flammability (solid, gaseous): Not applicable.

· Auto-ignition temperature: >150 °C (>302 °F) (Estimate)

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not self-igniting.

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

· Explosion limits:

Lower: Not determined.
Upper: Not determined.
Oxidizing properties Non-oxidizing.

Vapor pressure at 93.3 °C (200 °F): ~ 1.3 hPa (~ 1 mm Hg)
 Density at 20 °C (68 °F): 0.99 g/cm³ (8.262 lbs/gal)

Relative density
 Vapour density
 Evaporation rate
 Not determined.
 Not determined.

· Solubility in / Miscibility with

Water: Partly soluble.

• Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic: Not determined. **Kinematic:** Not determined.

• Other information No further relevant information available.

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10 Stability and reactivity

- · Reactivity
- · Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

Possibility of hazardous reactions

Toxic fumes may be released if heated above the decomposition point.

Strong exothermic reaction with acids.

Reacts with oxidizing agents.

Reacts with aluminium at raised temperatures.

- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- Hazardous decomposition products:

Under fire conditions only:

Carbon monoxide and carbon dioxide

Nitrogen oxides

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

Acute	Oxidity	•	
· LD/LC50 values that are relevant for classification:			
112-57-2 3,6,9-triazaundecamethylenediamine			
Dermal	LD50	660 mg/kg (rabbit)	
112-24-3 3,6-diazaoctanethylenediamin			
Oral	LD50	2500 mg/kg (rat)	
Dermal	LD50	805 mg/kg (rabbit)	

- · Primary irritant effect:
- on the skin: Caustic effect on skin and mucous membranes.
- · on the eye: Strong caustic effect.
- · **Sensitization**: Sensitization possible through skin contact.
- · Subacute to chronic toxicity: No further relevant information available.
- · Additional toxicological information:

Harmful

Corrosive

Irritant

Danger through skin absorption.

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

Toxic and/or corrosive effects may be delayed up to 24 hours.

· Carcinogenic categories

NTP (National Toxicology Program)

None of the ingredients is listed.

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· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

· Probable Routes of Exposure

Ingestion.

Inhalation.

Eve contact.

Skin contact.

· Acute effects (acute toxicity, irritation and corrosivity):

Harmful if swallowed.

Harmful in contact with skin.

Causes severe skin burns and eye damage.

· Repeated Dose Toxicity: Repeated exposures may result in skin and/or respiratory sensitivity.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: Toxic for aquatic organisms
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Toxic for fish
- · Additional ecological information:
- · General notes:

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

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Danger to drinking water if even small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

- · Waste disposal key: EPA RCRA Code (USA): D002.
- Uncleaned packagings:
- **Recommendation:** Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

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14 Transport information

· UN-Number

· **DOT** UN2735

Product is additionally classified as a MARINE POLLUTANT based on MARPOL and DOT rules. Labeling as a MARINE POLLUTANT is not required for non-bulk single package shipments by motor vehicle, rail car or aircraft. Bulk packaging consists of a maximum capacity of greater than 450L (119 gallons) for a liquid and a maximum net mass

greater than 400kg (882 pounds) for a solid. UN2735

· ADR, IMDG, IATA

· UN proper shipping name



Limited Quantity for packages less than 30 kg (66 lb) and inner packagings less than 5 L (1.3 gal).

·DOT Polyamines, liquid, corrosive, n.o.s.

(Tetraethylenepentamine, Triethylenetetramine), MARINE

POLLUTANT

· ADR 2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S.

(TETRAETHYLENEPENTAMINE, TRIETHYLENETETRAMINE), ENVIRONMENTALLY

HAZARDOUS

· IMDG POLYAMINES, LIQUID, CORROSIVE, N.O.S.

(TETRAETHYLENEPENTAMINE,

TRIETHYLENETETRAMINE), MARINE POLLUTANT

Polyamines, liquid, corrosive, n.o.s.

(Tetraethylenepentamine, Triethylenetetramine)

· Transport hazard class(es)

· DOT





· Class 8 Corrosive substances

· Label

· ADR





· Class 8 (C7) Corrosive substances

· Label

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·IMDG



· Class 8 Corrosive substances

· Label 8

·IATA



· Class 8 Corrosive substances

· Label 8

· Packing group

· DOT, ADR, IMDG, IATA

· Environmental hazards:

· Marine pollutant: Yes

Symbol (fish and tree)

Special marking (ADR): Symbol (fish and tree)

· Special precautions for user Warning: Corrosive substances

Danger code (Kemler):EMS Number:Segregation groups80F-A,S-BAlkalis

Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

· Transport/Additional information:

· DOT

• **Remarks:** Special marking with the symbol (fish and tree).

· ADR

· Excepted quantities (EQ) Code: E1

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

· IMDG

· Limited quantities (LQ) 5L

· Excepted quantities (EQ) Code: E1

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

UN "Model Regulation": UN2735, Polyamines, liquid, corrosive, n.o.s.

(Tetraethylenepentamine, Triethylenetetramine),

ENVIRONMENTALLY HAZARDOUS, 8, III

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15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · United States (USA)
- ·SARA
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · Proposition 65 (California)
- · Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- Carcinogenic categories
- EPA (Environmental Protection Agency)

None of the ingredients is listed.

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

State Right to Know Listings

None of the ingredients is listed.

- · Canadian substance listings:
- Canadian Domestic Substances List (DSL)

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

112-24-3 3,6-diazaoctanethylenediamin

· Canadian Ingredient Disclosure list (limit 1%)

112-57-2 3,6,9-triazaundecamethylenediamine

107-41-5 2-methylpentane-2,4-diol

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· Other regulations, limitations and prohibitive regulations

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.

· Date of preparation / last revision 04/10/2015 / -

· 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

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 4: Flammable liquids, Hazard Category 4

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

· Sources

SDS Prepared by:

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