

**K&E Chemical Co.**  
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# MINERAL DEPOSIT REMOVER

## 1. Products and Company Identification

### 1.1 Product Identifier

Product form ..... Mixture  
Product name ..... Mineral Deposit Remover  
Product code ..... MER

### Relevant identifier

Use of substance/mixture ..... Acid cleaner

### 1.3 Details of supplier of SDS

K&E Chemical Co.

Validation date: 5/21/2014

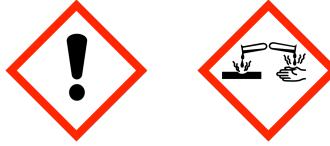
## 2. Hazards Identification

### 2.1 Hazardous Classification

Skin Corr. 1A H314

### 2.1 Label Elements

Hazardous Pictogram



Signal Word ..... "Danger"  
Hazardous Statements ..... H314 - Causes severe burns and eye damage.  
Precautionary Statements ..... P260 - Do not breathe dust/mist/spray.  
P264 - Wash hands and forearms thoroughly after handling.  
P280 - Wear protective gloves/eye protection/face protection.  
P301+P330+P331 - If swallowed rinse mouth. Do **NOT** induce vomiting.  
P303+P361+P353 - If on skin (or hair): Immediately take off all contaminated clothing. Rinse with water/shower.  
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 - Immediately call a poison center/doctor.  
P321 - Specific treatment (see First aid measures on this label).  
P363 - Wash contaminated clothing before use.  
P405 - Store locked up.  
P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.

**3. Composition Information**

Component	CAS Registry #	Component (%)	Classification (GHS-US)
Proprietary ingredient	Proprietary	10-15	Skin Corr. 1B, H314
Proprietary ingredient	Proprietary	1-5	Skin Irrit. 2, H315 Eye Irrit. 2A, H319
Proprietary Surfactant	Proprietary	<2	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336

**4. First-aid Measures****4.1 Description of first aid measures**

First-aid measures general:	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show label where possible).
First-aid measures after inhalation:	Remove to fresh air at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
First-aid measures after skin contact:	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.
First-aid measure after eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor or physician.
First-aid measure after ingestion:	Rinse mouth. Do <b>NOT</b> induce vomiting. Immediately call a POISON CENTER or doctor/physician.

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

Symptoms/injuries: Causes sever skin burns and eye damage.

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

No additional information available

**5. Fire Fighting Measures****5.1 Extinguishing media**

Suitable extinguishing media: Foam, dry powder, carbon dioxide, water spray and sand.  
 Unsuitable extinguishing media: Do not use a heavy water stream.

**5.2 Special hazards arising from substance or mixture**

Reactivity: Thermal decomposition generates : Corrosive vapors.

**5.3 Advice for firefighters**

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.  
 Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

**6. Accidental Release Measure****6.1 Personal precautions, protective equipment and emergency procedures****6.1.1 For non-emergency personnel**

Emergency procedures: Evacuate unnecessary personnel.

**6.1.2 For emergency responders**

Protective Equipment: Equip cleanup crew with proper protection.  
 Emergency procedures: Ventilate area.

**6.2 Environmental precautions**

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

**6.3 Methods and materials for containment and cleaning up**

Methods for cleaning up: Soak up spills with inert solids such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

**6.4 Reference to other sections**

See Heading 8, exposure controls and personal protection

**7. Handling and Storage**

**7.1 Precautions for safe handling**

Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and when leaving work. Provide good ventilation in process areas to prevent formation of vapor. Do not breathe dust/mist/spray. Avoid contact during pregnancy/while nursing.  
 Hygiene measures: Wash hands and forearms thoroughly after handling as with any chemicals.

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

Technical measures: Comply with applicable regulations.  
 Storage conditions: Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.  
 Incompatible Products: Strong bases. Strong Acids.  
 Incompatible Materials: Source of ignition. Direct sunlight.

**7.3 Specific end use(s)**

No additional information available.

**8. Exposure controls and personal protection**

Ingredients	CAS #	Exposure Limits
Proprietary ingredient	Proprietary ingredient	1 mg/m <sup>3</sup> TWA OSHA PEL 1mg/mSkin Corr. 1B, Skin Corr. 4 TWA Skin Corr. 1B, H314ACGIH TLV

**8.1 Exposure controls**

Personal protective equipment: Avoid all unnecessary exposure.  
 Hand protections: Wear protective gloves/eye protection/face protection/protective gloves.  
 Eye protection: Chemical goggles or face shield.  
 Foot Protection: Wear suitable work boots.  
 Skin and body protection: Wear suitable protective clothing  
 Respiratory protection: wear appropriate mask.  
 Other information: Do not eat, drink or smoke during use.

**9. Physical and Chemical Properties**

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

**Appearance:** Blue **pH:** 2  
**Odor:** mild odor **Boiling Point (F°):** Approx. 212  
**Solubility in water:** soluble in water, 63g/100mL **Flash Point (F°):** ≥ 200  
**Specific Gravity:** 1.03 **Vapor Pressure:** N/A

## 10. Stability and Reactivity

### 10.1 Reactivity

Thermal decomposition generates: Corrosive Vapors.

### 10.2 Chemical Stability

Stable under normal conditions. Not established.

### 10.3 Possibility of hazardous reactions

Not established.

### 10.4 Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

### 10.5 Incompatible materials

Strong acids. Strong Bases.

### 10.6 Hazardous decomposition products

Fume. Carbon monoxide. Carbon Dioxide. Thermal decomposition generates: Corrosive Vapors.

## 11. Toxicology Information

Acute toxicity:	Not classified
Skin Corrosion/irritation	Causes severe skin burns and eye damage. pH: 2
Serious eye damage/irritation:	Not classified pH: 2
Respiratory or skin sensitization:	Not classified
Germ mutagenicity:	Not classified
Carcinogenicity:	Not classified

## 12. Ecological Information

### 12.1 Toxicity

**Eco-toxicological Information:** Not expected to significantly bio-accumulate.

**Chemical Fate Information:** Not expected to be toxic to aquatic life.

## 13. Disposal Considerations

### 13.1 Waste treatment methods

Waste disposal recommendations:	Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/containers in accordance with local/regional/national/international regulations.
Ecology – waste materials:	Avoid release into the environment.

## 14. Transport Information

### In accordance with DOT regulations

Transport document description:	Acid solution, 8, III
UN-No.(DOT):	1760
DOT NA no.:	UN1805
Reportable Quantities:	5000lbs (2270 Kg) at 100%
Proper Shipping Name (DOT):	Compounds, cleaning liquid Contains Acid
DOT Hazard Classes:	Class 8 – Corrosive material 49 CFR 173.136
Hazard labels (DOT):	8 – Corrosive



DOT Symbols:	D – Proper shipping name for domestic use only, or to and from Canada, G – Identifies PSN requires technical name
Packing group (DOT):	III – Medium Danger
DOT Special Provisions (49 CFR 172.102):	<p>B2 – MC 300, MC 301, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized.</p> <p>IB2 – Authorized IBCs: Metal (31A, 31B and 31N): Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional requirement: Only liquids with vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.</p> <p>N37 – This material may be shipped in an integrally-lined fiber drum (1G) which meets general packaging requirements of subpart B of part 137 of this subchapter, the requirement of part 178 of this subchapter at the packing group assigned for the material and to any other special provisions of column 7 of the 172.101 table.</p> <p>T11 – 6 178.273(d)(2) Normal..... 178.275(d)(3)</p> <p>TP2 – a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperatures in degrees Celsius of the liquid during filling, and a is the mean coefficient of the cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees Celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where d15 and d50 are the densities (in units of mass per volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.</p> <p>TP27 – A portable tank having a minimum test pressure of 4 bar (400 kPa) may be used provided the calculated test pressure is 4 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 time the MAWP.</p>

## 15. Regulatory Information

### 15.1 US Federal Regulations

**OSHA Status:** These items meet the OSHA Hazard Communication Standard (29 CFR 1910 1200) definition of a hazardous material  
**TSCA Status:** All components of this solution are listed on the TSCA inventory or are mixtures (hydrates) of items listed on the TSCA inventory.

SARA Title III:

- Section 302 Extremely Hazardous Substances:** N/A
- Section 311/312 Hazardous Categories:** Acute/Chronic Health Hazard
- Section 313 Toxic Chemicals:** N/A

**California:** None Reported

**Massachusetts:** None Reported

**Pennsylvania**

**RCRA Status:** N/A

**CERCLA Reportable Quantity:** Not Regulated

**WHMIS:**

### 15.2 Regulations

#### 15.2.1 International

##### CANADA

No additional information is available.

##### EU-Regulations

No additional information is available.

**Classification according to Regulation (EC) No. 1272/2008 [CLP]**

**Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]**

Not Classified

**15.2.2 National**

No additional information is available.

## 16. Other Information

### HMIS RATINGS

Health:	[3] Serious hazard – Major injury likely unless prompt action is taken and medical treatment is given
Flammability Classification:	[0] Minimal hazard
Reactivity:	[1] Slight hazard
Pers. Protection:	[E]

### Disclaimer:

This information provided in this safety data sheet is correct to the best of our knowledge, information and belief at the date of publication. Information given is design only as guidance for safe handling use, processing, storage, transportation, disposal and is not to be considered a warranty or quality specification. The information relates only to specific material designated and may not be valid for such materials used in combination with any other material or in any process not a specified in this text.