



SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ECO-ETCH 1001

PRODUCT CODES: 1001

MANUFACTURER: KRETETEK INDUSTRIES

STREET ADDRESS: 66 RIVER ROAD

CITY, STATE, ZIP: HUDSON, NH 03051

INFORMATION PHONE: 855-573-8383

EMERGENCY PHONE: Chemtrec 800-424-9300

FAX PHONE: 855-573-8383

DATE REVISED: 7/1/18

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification of the substance or mixture

Corrosive to Metals – Category 1

Eye Damage – H318 Causes serious eye damage/irritation Category 1

Acute Toxicity – Category 1

GHS Label Elements



Symbols:

Signal Word: Danger

Hazard Statements:

May be corrosive to metals

Causes serious eye damage

Harmful if swallowed

Precautionary Statements:

Prevention:

Keep in original container

Wear eye or face protection

Wash hands thoroughly after handling. Do not eat, drink, or smoke when using this product.

Response: Absorb spillage to prevent damage

If SWALLOWED: Call a Poison Center or a doctor/physician if you feel unwell. Rinse mouth.

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

Immediately call a Poison Center or doctor/physician.

Storage: Store in corrosive resistant containers such as fiberglass, polyethylene, polypropylene or containers with resistant inner liner.

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

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture of substances listed below with nonhazardous additions

Dangerous components:

CAS: 506-89-8: Urea Monohydrochloride

There are no additional ingredients present, which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

SECTION 4: FIRST AID MEASURES

Eye Contact: Remove contact lenses if worn. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products

Skin Contact: Flush contaminated skin with plenty of water. Continue to rinse for at least 20 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is, conscious give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waist- band.

Most Important Symptoms/Effects, Acute and Delayed Potential Acute Health Effects

Eye Contact: Causes serious eye damage

Inhalation: Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Skin Contact: Causes mild skin irritation

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

Over Exposure Signs/Symptoms

Eye Contact: Adverse symptoms may include the following: Pain or irritation Watering Redness

Inhalation: No known significant effects or critical hazards.

Skin Contact: Adverse symptoms may include the following:

Irritation Redness

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

Indication of Immediate Medical Attention and Special Treatment Needed, If Necessary

Notes to Physician: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific Treatments: No specific treatment

Protection of First Aiders: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media: None known

Special hazards arising from the chemical: At temperatures above 60° C/140° F acid action on most metals may release hydrogen, a highly flammable and explosive gas.

Hazardous thermal: decomposition products

At temperatures above 60° C/140° F acid action on most metals may release hydrogen, a highly flammable and explosive gas.

Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides hydrochloric acid

Special protective actions: No special measures are required. for fire-fighters

Special protective: Fire-fighters should wear appropriate protective equipment and self-contained breathing equipment for fire-fighters apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

For non-emergency: Personnel: No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non emergency personnel".

Environmental Precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

SECTION 7: HANDLING AND STORAGE

Methods and Materials for Containment and Cleaning Up

Spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Precautions for Safe Handling

Protective Measures: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

Conditions for Safe: Storage, including any Incompatibilities: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

Occupational Exposure Limits: None

Appropriate Engineering Controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental Exposure Controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual Protection Measures:

Hygiene Measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/Face Protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin Protection

Hand Protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body Protection:

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other Skin Protection:

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory Protection: Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Form: liquid
Color: yellow
Odor: not available
Odor threshold: not available
pH: 7 typical [as is]
Freeze/melt point: <-30°C
Boiling point: 100°C (212°F)
Flash point: >93.3°C (>200°F)
Evaporation rate: >1 (Butyl acetate = 1)
Flammability (solid, gas): N/A
Explosion limits (upper/lower): N/A
Vapor pressure: <0.013kPa (<0.1 mmHg) [room temperature]
Vapor Density: >1 [Air = 1]
Relative Density: 1.21 +/- 0.2
Solubility in water: Easily soluble in the following materials: water
Partition Coefficient n-octanol/water: N/A
Auto-Ignition Temperature: N/A
Decomposition Temperature: N/A
Viscosity: N/A

SECTION 10: STABILITY AND REACTIVITY

Reactivity: No specific test data related to reactivity available for this product or its ingredients
Chemical stability: This product is stable
Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid: No specific data
Incompatible materials: Reactive or incompatible with the following materials: oxidizing materials. This material may be extremely hazardous in contact with chlorates and nitrates. Contact with hypochlorites (eg. Chlorine bleach, sulfides or cyanides) will liberate toxic gases. Contact with alkaline materials (eg. Aqua ammonia) will generate heat.
Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produce

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects
Acute toxicity: LD50, Oral, Exposure: 1120.9 mg/kg
Irritation/Corrosion: Mild skin irritant (OECD 404) Eye corrosive (OECD 405)
Sensitization: no data available
Carcinogenicity: No components are listed as carcinogens by IARC, ACGIH, OSHA or NTP.
Specific Target Organ single exposure: no data available
Specific Target Organ repeated exposure: no data available
Aspiration hazard: no data available
Information on the likely routes of exposure: Dermal contact, eye contact, inhalation, ingestion
Potential Acute Health Effects:
Eye contact: Causes serious eye damage
Inhalation: Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Skin contact: Causes mild skin irritation
Ingestion: Irritation to mouth, throat and stomach.
Symptoms related to the physical, chemical and toxicological characteristics
Eye contact: Adverse symptoms may include the following: Pain or Irritation Watering Redness
Inhalation: No known significant effects or critical hazards.
Skin Contact: Adverse symptoms may include the following: Irritation Redness
Ingestion: No known significant effects or critical hazards

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects: No known significant effects or critical hazards

Potential delayed effects: No known significant effects or critical hazards

Long Term exposure

Potential immediate effects: No known significant effects or critical hazards

Potential delayed effects: No known significant effects or critical hazards

Potential chronic health effects

General: No known significant effects or critical hazards

Carcinogenicity: No known significant effects or critical hazards

Mutagenicity: Not mutagenic (OECD 471)

Teratogenicity: No known significant effects or critical hazards

Developmental effects: No known significant effects or critical hazards

Fertility effects: No known significant effects or critical hazards

Numerical measures of toxicity

Acute toxicity estimates: There is no data available.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity:

Ingredient name BJSI Result: Acute LC50 71 mg/L Species: Cariodaphnia dubia Exposure: 48 hours

Ingredient name BJSI Result: Acute LC0 142 mg/L Species: Rainbow trout Exposure: 96 hours

Persistence and Degradability: There is no data available

Bioaccumulative Potential: There is no data available

Mobility in Soil

Soil/water partition coefficient: Not available

Other adverse effects: No known significant effects or critical hazards.

SECTION 13: WASTE DISPOSAL

Disposal Methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of

surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORTATION

DOT: Not regulated for transport

Exempt under DOT 49 CFR 173.154 (d). This material is corrosive to aluminum only. Not corrosive to mild steel and skin.

IMDG : 1760 1 Corrosive liquid N.O.S. (ureamonohydrochloride) Transport Hazard Class: 8, Packing Group: III

IATA: 1760 1 Corrosive liquid N.O.S. (ureamonohydrochloride) Transport Hazard Class: 8, Packing Group: III

This material is corrosive to aluminum only. Not corrosive to mild steel and skin.

TDG : 1760 1 Corrosive liquid N.O.S. (ureamonohydrochloride) Transport Hazard Class: 8, Packing Group: III

This material is corrosive to aluminum only. Not corrosive to mild steel and skin.

Special precautions for user: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

SECTION 15: REGULATORY INFORMATION

US Federal Regulation: United State Inventory (TSCA): All components are listed or exempted.

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPS): Not listed
Clean Air Act Section 602: Class I Substances: Not listed
Clean Air Act Section 602: Class II Substances: Not listed
DEA List I Chemicals (precursor chemicals): Not listed
DEA List II Chemicals (essential chemicals): Not listed
SARA 302/304 Composition/Information on Ingredients: Not listed
SARA 311/312 Classification: Immediate (acute) health hazard
Composition/Information on Ingredients:
Name: Urea Monohydrochloride
Fire Hazard: No
Sudden release of pressure: no
Reactive (acute): no
Immediate Health Hazard: Yes
Delayed (chronic) Health Hazard: No

SECTION 16: OTHER INFORMATION

DISCLAIMER: The information Contained herein is based on the data available and is believed to be accurate, However, the manufacturer makes no warranty expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Accordingly, we assume no responsibility for injury from the use of this product.