

**SECTION 1: PRODUCT AND COMPANY INFORMATION**

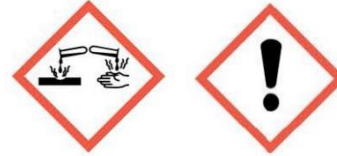
Issue Date: 05/05/15  
Date of previous: 07/15/11

**Manufacturer** Modern Stone Technologies–2225 West Pecos Rd.-Suite 12 – Chandler– AZ 85224 (866) 868-0810  
**Product Family** Cleaner  
**Trade Name(s)** Revive  
**Recommended Uses** Acid replacement specialized cleaning, etching, and scale remover

**24-Hour Emergency Phone Number - CHEMTREC International: (703) 527-3887**

**SECTION 2: HAZARD IDENTIFICATION****Classification:**

Skin Corrosion/Irritation, Category 1 (Corrosive to Metals)  
Acute Toxicity (Oral), Category 4  
Eye Damage/Irritation, Category 1



**Hazard Pictogram:** Corrosion, Exclamation

**Signal Word:** Danger

**Hazard Statement:** Causes severe burns and eye damage. Harmful if swallowed. May be corrosive to metals.

**Precautionary Statements:****Prevention**

Do not breath vapor or mist if sprayed. Wash immediately if skin or eye contact occurs. Wear protective gloves/clothing/eye wear and face gear. **Do not eat drink or smoke when using this product.**

**Response**

**IF SWALLOWED:** Rinse mouth. Do NOT induce vomiting. **IF ON SKIN:** Take off contaminated clothing immediately. Wash skin thoroughly. Wash contaminated clothing before reuse. **IF INHALED:** Remove person to fresh air and keep comfortable for breathing. Call medical doctor or poison control. Seek medical attention immediately. **IF IN EYES:** Rinse with plenty of fresh water for 20 minutes. (remove contact lenses if present).

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS Number	Percentage
Urea Monohydrochloride	506-89-8	10-30%

Varied percentages are shown due to batch variations and/or to protect formula confidentiality. This mixture may contain additional non-hazardous ingredients not required in this section, and any available exposure limits will be recorded in section 8.

**SECTION 4: FIRST AID MEASURES**

**Skin Contact:** In case of contact, immediately flush skin with plenty of water for at least 20 minutes while removing contaminated clothing and shoes. Call medical doctor or poison control center immediately. Get medical attention immediately. Wash clothing before reuse.

**Eye Contact:** Immediately flush eyes with plenty of water for at least 20 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

**Inhalation:** Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Call medical doctor or poison control center immediately. Get medical attention immediately.

**Ingestion:** Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If vomiting occurs keep head low to prevent vomit from entering lungs. Call medical doctor or poison control center immediately.

**SECTION 5: FIREFIGHTING MEASURES**

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

**Unusual Fire and Explosion Hazards:** No specific fire or explosion hazard.

**SECTION 6: ACCIDENTAL RELEASE MEASURES****Refer to Section 8: Exposure Control and Personal Protection**

**Emergency Action:** Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

**Spill/Leak Procedure:** Stop leak if without risk. 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 non-combustible, 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.

**Notification:** 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

##### Refer to Section 8: Exposure Control and Personal Protection

**Handling:** Put on appropriate personal protective equipment (see Section 8). 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. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Empty containers retain product residue and can be hazardous.

**Storage:** 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 CONTROL AND PERSONAL PROTECTION

**Engineering Controls:** Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Eye and Face Protection:** Safety eyewear should be used when there is a likelihood of exposure. Recommended: Chemical splash goggles or face shield.

**Skin 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. Recommended: Rubber apron and/or long sleeves.

**Respiratory Protection:** 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. Recommended: Self-contained breathing apparatus (SCBA) should be used to avoid inhalation of the product. Ensure an MSHA/NIOSH-approved respirator or equivalent is used.

#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid		
Odor	Not available		
Color	Clear		
Melting/Freezing Point (°F/°C)	< -30°C		
Boiling/condensation point (°F/°C)	>100°C (>212°F)		
Relative Density	1.21 +/- 0.2		
Vapor Density	>1 [Air=1]		
Evaporation Rate	<1 (butyl acetate = 1)		

#### SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** No specific test data available.

**Chemical Stability:** The product is stable.

**Stability/Incompatibility:** 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.

**Conditions to Avoid:** No data

**Hazardous Reactions/Decomposition Products:** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

#### SECTION 11: TOXICOLOGICAL INFORMATION

##### Acute Toxicity:

Urea Monohydrochloride: LD50 Oral (Rat) = 1120.9 mg/kg

##### Carcinogenicity:

No components listed as carcinogens.

#### SECTION 12: ECOLOGICAL INFORMATION

**Ecotoxicity:** No known significant effects or critical hazards.

##### Aquatic ecotoxicity:

Urea Monohydrochloride:

Acute LC50 >142 mg/L Rainbow trout - 96 hours

Acute LC50 71 mg/L Ceriodaphnia dubia – 48 hours

#### SECTION 13: DISPOSAL CONSIDERATION

Do not reuse empty containers. Containers should be recycled or disposed of at an approved waste facility. Unused product and container should be disposed of according to local, state, and federal regulations at an appropriate facility.

**SECTION 14: TRANSPORT INFORMATION**

**DOT Classification:** Not regulated. This material is corrosive to aluminum only. Not corrosive to mild steel or skin.

**TDG Classification:**

**Proper Shipping Name** - CORROSIVE LIQUID, N.O.S. (Urea Monohydrochloride)  
**UN number** – UN1760  
**Class** – 8  
**Packing Group** – III

**Mexico Classification:**

**Proper Shipping Name** - CORROSIVE LIQUID, N.O.S. (Urea Monohydrochloride)  
**UN number** – UN1760  
**Class** – 8  
**Packing Group** – III

**IMDG Classification:**

**Proper Shipping Name** - CORROSIVE LIQUID, N.O.S. (Urea Monohydrochloride)  
**UN number** – UN1760  
**Class** – 8  
**Packing Group** – III

**IATA-DGR Classification:**

**Proper Shipping Name** - CORROSIVE LIQUID, N.O.S. (Urea Monohydrochloride)  
**UN number** – UN1760  
**Class** – 8  
**Packing Group** – III

**SECTION 15: REGULATORY INFORMATION**

**U.S. Federal regulations**

**TSCA 8(a) IUR Exempt/Partial exemption:** All components are listed or exempted.

**United States inventory (TSCA 8b):** All components are listed or exempted.

**SARA 302/304/311/312 extremely hazardous substances:** No products were found.

**SARA 302/304 emergency planning and notification:** No products were found.

**SARA 302/304/311/312 hazardous chemicals:** Urea Monohydrochloride 506-89-8

**SARA 311/312 MSDS distribution - chemical inventory - hazard identification:** Immediate (acute) health hazard

<b>Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs):</b>	Not Listed
<b>Clean Air Act Section 602 Class I Substances:</b>	Not Listed
<b>Clean Air Act Section 602 Class II Substances:</b>	Not Listed
<b>DEA List I Chemicals (Precursor Chemicals):</b>	Not Listed
<b>DEA List II Chemicals (Essential Chemicals):</b>	Not Listed

**California Prop. 65:** No products were found.

**Canada inventory:** All components are listed or exempted.

**Mexico:** Health 3, Flammability 0, Reactivity 0, Special 0

**Australia inventory (AICS):** All components are listed or exempted.

**China inventory (IECSC):** All components are listed or exempted.

**Japan inventory:** All components are listed or exempted.

**Korea inventory:** All components are listed or exempted.

**New Zealand Inventory of Chemicals (NZIoC):** All components are listed or exempted.

**Philippines inventory (PICCS):** All components are listed or exempted.

**SECTION 16: OTHER INFORMATION**

Notice. The information presented herein is based on data considered to be accurate as of the date of preparation of this Safety Data Sheet. However, no warranty or representation, expressed or implied, is made as to the accuracy or completeness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In addition, no responsibility can be assumed by the vendor for any damage or injury resulting from abnormal use, from failure to adhere to recommended practices, or from any hazards inherent in the nature of the product. This SDS complies with the requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200