

Section 1: Product & Company Information

Print Date: March 29, 2018

Product Identifier: ScaleAway Liquid Descaler

Other Means of Identification Product Number: No data available.

Recommended Use and Restrictions on Use Recommended Use: Calcium, lime, and rust remover. Restrictions on Use : None known.

Manufacturer / Importer / Supplier / Distributor Information Company Name: CORECHEM Inc. Address: 4320 Greenway Drive Knoxville, TN 37918 USA

> Information Telephone Number: 1-865-524-4239 Fax Number: 1-865-524-3375 Website: www.corecheminc.com Contact Person: Regulatory Manager E-mail: regulatory@corecheminc.com

Emergency Phone Number: Chemtrec® 1-800-424-9300 / Outside USA 1-703-527-3887 (monitored 24 hours/day)

Section 2: Hazards Identification

GHS Hazard Classification(s)

In accordance with OSHA Hazard Communication Standard 29 CFR 1910.1200 (HazCom 2012).

Physical Hazard(s) Corrosive to Metals - 1

Health Hazard(s)

(Corrosion)Damage/Irritation, Eye - 1 Acute Toxicity, Oral - 4

Environmental Hazard(s) Not classified.

Label Elements Signal Word DANGER

Hazard Symbol(s)



Hazard Statement(s)

H290: May be corrosive to metals. H302: Harmful if swallowed. H318: Causes serious eye damage.

Precautionary Statements

General Not applicable.

Prevention

P234: Keep only in original container.

- P264: Wash face, hands and any exposed skin thoroughly after handling.
- P270: Do not eat, drink or smoke when using this product.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response

P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. 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 or doctor/physician.

P330: Rinse mouth.

P390: Absorb spillage to prevent material damage.



Print Date: March 29, 2018

Storage

P406: Store in corrosive resistant container with a resistant inner liner.

Disposal

P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC)

None known.

Section 3: Composition/Information on Ingredients

Mixture

Chemical Identity ²	Common Name/Synonym(s)	CAS # 3	Weight %	Impurity or Stabilizing Additive
Urea, Monohydrochloride	-	506-89-8	50 - < 60 %	No
Performance additives	-	Proprietary	1 - < 5%	No

- 1. Information regarding the composition and the percent ranges of the mixtures ingredients are not presented as it Confidential Business Information (CBI). Where a medical emergency exists (as determined by medical professional), timely disclosure of CBI is assured. The information omitted pertains to only the names of the substances and the concentration in the mixture (product) and can only be requested by a doctor/physician or Local/State/Provincial or Federal Authority.
- 2. Non-hazardous ingredients are not presented as to protect the proprietary formula of the product.
- 3. "--"Indicates ingredient is a mixture and contains multiple ingredients or may have no identifying CAS number.

Section 4: First-Aid Measures

General Information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Wash contaminated clothing before reuse.

Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

Skin Contact

Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye Contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion

Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Symptoms

Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Indication of immediate medical attention and special treatment needed

Hazards

No data available.

Treatment

Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

Section 5: Fire-Fighting Measures

General Fire Hazards No data available.

Suitable (and Unsuitable) Extinguishing Media

Suitable Extinguishing Media

Water fog. Foam. Dry chemical powder. Carbon Dioxide. Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Chemical

During fire, gases hazardous to health may be formed.

Special Protective Equipment and Precautions for Firefighters

Special Fire-Fighting Equipment Procedures

No data available.

Special Protective Equipment for Fire-Fighters

As in any fire, wear self-contained breathing apparatus pressure-demand (OSHA/NIOSH approved or equivalent) and full protective gear.



Print Date: March 29, 2018

Section 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

Immediately contact emergency personnel. Stop leak if without risk Use suitable protective equipment. Keep unnecessary personnel away. Do not touch or walk through spilled material.

Methods and Materials for Containment and Clean-Up

If emergency personnel are unavailable, vacuum or carefully scoop up spilled material and place in an appropriate container for disposal Avoid creating dusty conditions and prevent wind disposal.

Notification Procedures

No data available.

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 cause environmental pollution (Sewers, waterways, soil, or air).

Section 7: Handling and Storage

Precautions for Safe Handling

Use caution when handling/transferring. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Do not breathe mist or vapor. Use only with adequate ventilation. Wear appropriate personal protective equipment. Transfer and storage systems should be compatible. Observe good industrial hygiene practices.

Conditions for Safe Storage, including any Incompatibilities

Keep out of reach of children. Keep container in a cool, well-ventilated area. Keep container tightly closed. Store between the following temperatures: 40 and 120 °F.

Section 8: Exposure Controls/Personal Protection

Control Parameters

Occupational Exposure Limits

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

Biological Limit Values

The product does not contain any relevant quantities of hazardous materials with assigned biological limit values.

Appropriate Engineering Controls

Provide eyewash station. Use general ventilation.

Individual protection measures, such as personal protective equipment (PPE)

General Information

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Eye/Face Protection

Wear safety glasses with side shields.

Skin Protection

Hand Protection

Wear appropriate chemical resistant gloves.

Other

Wear appropriate chemical resistant clothing.

Respiratory Protection

No personal respiratory protective equipment normally required.

Hygiene Measures

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated footwear that cannot be cleaned. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before reuse. Avoid contact with eyes, skin, and clothing.

Section 9: Physical and Chemical Properties

Appearance:	
Physical State:	Liquid
Color:	Clear amber
Odor:	Pungent
Odor Threshold:	Not available.
pH:	< 1 (<1.0 at 1:16)
Melting Point/Freezing Point:	32 °F (0 °C)
Initial Boiling Point and Boiling Range:	212 °F (100 °C)
Flash Point:	None to boiling.



Print Date: March 29, 2018

Evaporation Rate (butyl acetate=1):	Not available.			
Flammability (solid, gas):	Not available.			
Upper/Lower Limit on Flammability or Explosive Limits				
Flammability Limit – Upper:	Not available.			
Flammability Limit – Lower:	Not available.			
Explosive Limit – Upper:	No data available.			
Explosive Limit – Lower:	No data available.			
Vapor Pressure:	No data available.			
Vapor Density (air =1):	Not available.			
Relative Density (water=1):	1.2-1.3			
Solubility(ies):				
Solubility in water:	Complete			
Solubility (other):	No data available.			
Partition coefficient (n-octanol/water):	No data available.			
Auto-Ignition Temperature:	No data available.			
Decomposition Temperature:	No data available.			
Viscosity:	No data available.			
Other Information:				
Molecular Weight:	No data available.			
Formula:	No data available.			

Section 10: Stability and Reactivity

Reactivity

, Reactive or incompatible with the following materials: alkalis, metals

Chemical Stability

Stable. Contact with some metals may produce flammable hydrogen gas.

Possibility of Hazardous Reactions

Hazardous polymerization does not occur.

Conditions to Avoid

Heating above 110 °C results in an exothermic decomposition with rapid release of carbon dioxide gas.

Incompatible Materials

Avoid contact with oxidizers. This material may be extremely hazardous in contact with chlorates or nitrates. This material is acidic. Contact with hypochlorite (e.g. chlorine bleach, sulfides, or cyanides) will liberate toxic gases. Contact with alkaline materials (e.g. aqua ammonia) will general heat.

Hazardous Decomposition Products

Thermal decomposition may yield oxides of carbon, nitrogen, and chlorine. Hydrogen gas may be released upon contact with certain metals.

Section 11: Toxicological Information

Information on routes of exposure

Ingestion: Expected to be a low ingestion hazard. May cause discomfort if swallowed. Inhalation: No adverse effects due to inhalation are expected. Skin Contact: No adverse effects due to skin contact are expected. Eye Contact: Causes serious eye damage.

Information on Toxicological Effects

Acute Toxicity (List all possible routes of exposure)

Oral

No data available.

Dermal No data available.

.

Inhalation No data available.

Repeated Dose Toxicity No data available.

Skin Corrosion/Irritation No data available.

Serious Eye Damage/Eye Irritation No data available.

Respiratory/Skin Sensitization No data available.

Carcinogenicity



Print Date: March 29, 2018

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. US. National Toxicology Program (NTP) Report on Carcinogens

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Germ Cell Mutagenicity

In Vitro No data available. In Vivo No data available.

Reproductive Toxicity No data available.

Specific Target Organ Toxicity – Single Exposure No data available.

Specific Target Organ Toxicity – Repeated Exposure No data available.

Aspiration Hazard No data available.

Other Effects No data available.

Section 12: Ecological Information

Ecotoxicity

Acute Hazards to the Aquatic Environment

Fish No data available.

Aquatic Invertebrates No data available.

IND UALA AVAIIADIE.

Toxicity to Aquatic Plants No data available.

Chronic Hazards to the Aquatic Environment

Fish No data available.

Aquatic Invertebrates No data available.

Toxicity to Aquatic Plants No data available.

Persistence and Degradability

Biodegradation This material is expected to biodegrade. BOD/COD Ratio No data available.

Bioaccumulative Potential

Bioconcentration Factor (BCF)

This material does not contain chemicals that have known bioaccumulative potential. Partition Coefficient n-octanol / water (log Kow) No data available.

Mobility in Soil

No data available.

Other Adverse Effects

None known.

Section 13: Disposal Considerations

Disposal Instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.



Print Date: March 29, 2018

Contaminated Packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warning even after container is emptied.

Section 14: Transportation Information

US Department of Transportation (DOT) UN Number: UN1760 UN Proper Shipping Name: Corrosive liquids, n.o.s. Technical Name: (contains organic acid salts) Hazard Class : 8 Subsidiary Hazard Risk: Packing Group: III DOT Label/Placard Exemptions: 49CFR 173.154 (d) This material is corrosive to aluminum only, not mild steel or skin. This material is not regulated as a hazardous material for transport by the U.S. Department of Transportation when transported by highway or rail. Special Provisions: B2, IB2, T7, TP2 Packaging Exceptions: 49CFR 173.202 Packaging Non-Bulk: 49CFR 173.243 Packaging Bulk: None Reportable Quantity (RQ): No Marine Pollutant: No Poison Inhalation Hazard: No 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 Emergency Response Guidebook (ERG) #: 154

International Maritime Dangerous Goods (IMDG) / International Air Transport Association (IATA)

UN Number: UN 1760 UN Proper Shipping Name: Corrosive liquids, n.o.s. Technical Name: (contains organic acid salts) Hazard Class : 8 Subsidiary Hazard Risk: -Packing Group: III Reportable Quantity (RQ): No Marine Pollutant: No Poison Inhalation Hazard: No Emergency Response Guidebook (ERG) #: 154

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

Section 15: Regulatory Information

US Federal Regulations

Toxic Substance Control Act (TSCA), Chemical Substance Inventory, Section 8(b)

This product or ingredient(s) are listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substance List (40 CFR 302.4) No chemical(s) in this material are subject to the reporting requirements of CERCLA.

Clean Air Act (CAA), Section 112(r)

No chemical(s) in this material are subject to the reporting requirements of CAA.

Emergency Planning and Community Right-To-Know Act (EPCRA)

EPCRA 302 Extremely Hazardous Substance

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 302.

EPCRA 304 Emergency Response Notification

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 304.

EPCRA 311/312 Emergency and Hazardous Materials Reporting

Fire Hazard: No Sudden Release of Pressure: No Reactive: No Acute (Immediate) Health Hazard: Yes Chronic (Delayed) Health Hazard: No

EPCRA 313 Toxic Chemical Release Inventory (TRI) Reporting

This material does not contain any chemical(s) with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)



Print Date: March 29, 2018

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Important Note: Due to the changing nature of regulatory requirements, the information in this document should NOT be considered all-inclusive or authoritative. Users should make their own investigations to determine the suitability of the information for their particular purposes. International, Federal, State and Local regulations should be consulted to determine compliance with all required reporting requirements.

Section 16: Other Information

Hazardous Materials Identification System (HMIS®) Classification

Health Hazard: 2

Chronic Health Hazard: /

Flammability: o Physical Hazard: o

(Hazard Rating: o - Minimal / 1 - Slight / 2 - Moderate / 3 - Serious / 4 - Severe)

National Fire Protection Association (NFPA 704) Rating

Health Hazard: 2

Fire Hazard: o

Reactivity Hazard:

Special: N/A

(Hazard Rating: o — Minimal / 1 — Slight / 2 — Moderate / 3 — Serious / 4 — Severe)

Prepared By: Regulatory Manager Version #: 001 Issue Date: September 23, 2015 Revision Date: March 29, 2018 Revisions: 01

Key to Abbreviations and Acronyms

ATE - Acute Toxicity Estimate **BCF** - Bioconcentration Factor EC50 - Effective concentration, 50% IDHL - Immediately Dangerous to Life and Health Kg – Kilogram I – Liter lb – Pound LC50 - Lethal Concentration, 50% LD50 - Lethal Dose, 50% mg - milligram ml – milliliter N/A – Not Applicable N/D - Not Determined PEL – Permissible Exposure Limit REL – Recommended Exposure Limit STEL - Short-term Exposure Limit TWA - Time weighted average

AIHA - American Industrial Hygiene Association BEI - Biological Exposure Indices CAS – Chemical Abstracts Service DOT – US Department of Transportation EPA – US Environmental Protection Agency GHS - Globally Harmonized System of Classification and Labelling of Chemicals IARC - International Agency for Research on Cancer IATA - International Air Transport Association IBC - Intermediate Bulk Container IMDG - International Maritime Dangerous Goods NIOSH – National Institute for Occupational Safety and Health NTP - National Toxicology Program OSHA – US Occupational Health and Safety Administration SARA - US EPA Superfund Amendments and Reauthorization Act TSCA – US EPA Toxic Substances Control Act UN - United Nations

ACGIH - American Conference of Industrial Hygienists

References

HSDB® - Hazardous Substances Data Bank

Disclaimer

The information in this SDS was obtained from sources which we believe are reliable. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS CORRECTNESS. The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.