1. **Product Identification**

**Product Name:** Thrift Calci-Buster  
**General Use:** Scale and deposit cleaner  
**Manufactured for:** Thrift Marketing, Inc.  
  P.O. Box 2529  
  Shawnee Mission, KS 66201  
  Phone: (913) 236-7474  
**Emergency:** INFOTRAC: (800) 535-5350  
**Revision date:** June 04, 2014

2. **Hazards Identification**

**Emergency Overview (OSHA Hazards):** DANGER! Toxic if swallowed. WARNING! Possibly causes skin irritation. May cause serious eye irritation. May cause respiratory irritation. Corrosive to metal.

**Hazard Classification (categories in parentheses):** Acute toxicity - oral (3). May cause skin irritation (2). Can cause serious eye irritation (2A). Respiratory tract irritant (3). Corrosive to metal (1). **DANGER! WARNING!**

**HMIS Rating:**
- Health 2
- Flammability 0
- Reactivity 0

Personal protection ration to be supplied by user depending on use conditions.

**Hazard Statements:**
- H290 May be corrosive to metals  
- H301 Toxic if swallowed  
- H316 May cause mild skin irritation  
- H319 Causes serious eye irritation  
- H335 May cause respiratory irritation

**Precautionary Statements:**
- P262 Do not get in eyes, on skin, or on clothing  
- P280 Wear protective gloves/protective clothing/eye protection/face protection  
- P301 + P310 + P330 + P331 IF SWALLOWED:  
  Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.  
- P302 + P352 + P362 + P333 + P313 IF ON SKIN: Wash
with soap and water. Take off contaminated clothing and wash before reuse. If skin irritation or a rash occurs: Get medical advice/attention.

P304 + P341 + P342 + P322 + P313 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Administer oxygen and get medical advice/attention.

P305 + P351 + P338 + P313 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Get medical advice/attention.

NOTE—Information provided in this MSDS represents characteristics and physical data of the concentrated material as supplied.

3. Composition
Chemical Family: Urea hydrochloride

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Wt %</th>
<th>CAS Number</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>NIOSH REL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urea</td>
<td>&gt; 80</td>
<td>506-89-8</td>
<td>N/E</td>
<td>N/E</td>
<td>N/E</td>
<td>N/E</td>
</tr>
<tr>
<td>hydrochloride</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. First Aid
Inhalation: Immediately remove individual to fresh air. If not breathing, give artificial respiration. Get medical advice/attention if symptoms develop or persist.
Skin Contact: Remove contaminated clothing and foot wear. Wash thoroughly with soap and water and do not reuse clothing until properly cleaned. If a rash should develop, get medical attention.
Eye Contact: Immediately flush eyes with plenty of cool, clean water for at least 20 minutes. Keep eyelids apart to maintain maximum contact with water. Do not allow the individual to rub their eyes. Get medical attention/attention.
Ingestion: Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. If individual is conscious and able to swallow, quickly have the victim drink water to dilute. Do not give anything by mouth if individual is unconscious or is having convulsions. Seek medical attention immediately.

5. Fire and Explosion Data
Flash Point: > 212 Fahrenheit – Tag Closed Cup
Extinguishing Media: Water spray, dry chemical or carbon dioxide. Use water spray to keep containers cool. Do not flush into a storm drain or public sewer.
Special Procedures: Use self-contained breathing apparatus (SCBA) and proper personal protection clothing.
Unusual Hazards: At temperatures above 140º F, low pH of product can react with metals to release hydrogen gas. During a fire, vapors can be released that might contain sulfuric acid or oxides of carbon and nitrogen, and firefighters should attack and contain fire and any fumes accordingly.

6. Accidental Release Procedures
Spills or Leaks: Clear area of non-essential personnel. Use proper personal protective equipment (PPE). Contain spill or leak and soak up as much material as possible. Put collected material into suitable containers for disposal. Close or cap valves and/or block
or plug hole in leaking container and transfer to another container. Use appropriate containment to avoid runoff or release to sewer or waterways.

Recovered solids or liquids may be sent to a licensed reclaimed or disposed of in a permitted waste management facility. Consult Federal, state or local disposal authorities for approved procedures. Any disposal must be in compliance with Federal, state, or local regulations.

7. Handling and Storage
Precautions: The material is safe to store in well-ventilated areas at ambient temperatures of between 35 and 120 degrees F. Keep containers closed when not in use to prevent evaporative losses and possible contamination. Do not store concentrated product in any type of metal container.
Other: Eye wash and safety showers are recommended in the immediate work area. Check with your State OSHA to determine the maximum distance for stations to be placed in regards to possible chemical exposure. Protect from freezing.

8. Employee Protection and Control Measures
NOTE—No exposure standard exists.
Respiratory Protection: Not normally required. In situations where a risk of inhalation occurs, such as where product is being misted, a respirator or air delivery system in accordance with 29 CFR 1910.134 (OSHA), 42 CFR 84 (NIOSH), and any other applicable regulations may be recommended.
Ventilation: Normal ventilation has been found to be generally adequate. The end user must determine if the process or methods involved with the use of this material requires any additional ventilation.
Eye Protection: Safety glasses with side shields or splash proof chemical goggles should be used when working with concentrated product. If product is being sprayed or splashing is possible, splash proof chemical goggles or a splash shield in accordance with 29 CFR 1910.133 is recommended. Appropriate eye protection must be worn instead of, or in conjunction with, contact lenses.
Skin Protection: As is a good practice with all materials, chemical resistant gloves, including rubber, butyl, or neoprene, should be worn when working with the product to avoid skin contact. Rubber apron, sleeves, and boots or other acid-resistant protective clothing are recommended for personnel involved in handling and transferring concentrated chemical.
Other: Not generally required under normal working conditions. The end user must determine if the process or methods involved required other personal protection clothing and/or equipment.
Work/Hygienic Practices: Do not consume food, drink, or smoke in areas where chemicals are being stored or handled. After working with chemicals wash hands thoroughly before handling food or beverages. Segregate and launder contaminated clothing before reuse.

9. Physical and Chemical Properties
Appearance: Colorless to pale yellow liquid
Odor: Mild
pH: < 1.0
Vapor Density: Heavier than air
Boiling Point: > 212 F
Water Solubility: Soluble
Specific Gravity (H₂O = 1): 1.205 typical
Evaporation Rate: Less than water
Percent Volatiles: N/D
Flash Point: > 212 Fahrenheit – Tag Closed Cup

10. Stability and Reactivity
Chemical Stability: Stable
Conditions to Avoid: Do not store or transfer neat product in metals, such as aluminum, yellow metals such as copper or brass, stainless steel, or other steel alloys. Avoid temperatures above 230º F.
Incompatibility: Avoid contact with strong bases and oxidizers. Contact with hypochlorites, chlorine bleach, sulfides, or cyanides can liberate toxic gases.
Hazardous Decomposition: Oxides of carbon and nitrogen
Polymerization: Will not occur

11. Toxicological Information
Acute Toxicity Data: Ingestion of large quantities may be harmful or even fatal.
Irritant Data: Possible skin and respiratory irritant; severe eye irritant.
Primary Routes of Exposure (Acute):
Eye and Skin Exposure: May cause mild but reversible skin irritation with prolonged or repeated exposure to concentrated product. Concentrated product can cause severe irritation to eyes.
Inhalation: No long-term effects are expected, but excessive breathing of vapors may cause discomfort, dizziness, or mild irritation.
Ingestion: Ingestion of small quantities may cause gastric distress, vomiting, and diarrhea. Ingestion of large quantities may be harmful or even fatal.

Primary Routes of Exposure (Chronic):
The effects from chronic exposure to this product have not been fully evaluated, but none have been observed.
Carcinogenicity: None of the components present in this material are listed on the IARC, NTP, or OSHA carcinogen lists.

Safety Precautions: As with all chemicals, avoid contact with eyes, skin, and clothing; wash thoroughly after handling, especially before eating, drinking, or smoking.

12. Ecological Information
Contact your representative for assistance.

13. Disposal Considerations
Waste Disposal: All disposals of this material must be done in accordance with Federal, state and local regulations. Waste characterization and compliance with disposal regulations are the responsibilities of the waste generator.

14. Transportation Information
DOT Proper Shipping Name: UN1760, Corrosive liquid, N.O.S. (urea hydrochloride), 8, PG III

15. Regulatory Information
EPCRA, Section 311: Health: Immediate Health (possible skin and respiratory irritant, severe eye irritant. Potential ingestion toxin).
**Toxic Substances Control Act (TSCA) Status:** All ingredients in this product appear on either the public TSCA inventory or the confidential TSCA inventory.

**16. Other Information**

Last Revision: Not applicable  
Current Revision: June 04, 2014  
Revision summary: New MSDS  
Prepared By: Chemical Specialties, LLC

This information is related only to the specific material designated herein and does not relate to use in combination with any other material or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability, or completeness. It is the user’s responsibility to satisfy himself as to the suitability and completeness of this information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information, nor do we offer warranty against patent infringement.

End of MSDS