

## ULTRA-DESCALER

### BIODEGRADABLE WATER SCALE CLEANER

#### Applications:

An inhibited, low foaming mineral acid compound for removing hard water scale, lime, rust and other oxides. This product is designed to be used as a competitive product to Rydlyme®, Sublime® and other similar products.

Ultra-Descaler is designed to remove hard water scale from industrial equipment such as boilers, heat exchange units, water cooled compressors and connecting pipe lines. This version is more pleasant to handle because it fumes less and smells better than competitive products. Yet it can be diluted with water by as much as 50% for performance similar to competitive products above. Hard water scale is removed down to the base metal with no scraping or rodding needed. It also removes metal oxides, such as rust from ferrous metal equipment and ferrous stock metal. Ultra-Descaler is suitable for use in USDA federally inspected meat and poultry facilities for descaling heat exchangers.

Ultra-Descaler is compounded with inhibitors, surfactants, defoaming agents, various diluted acids, a pleasant cover scent and a dye to help differentiate it from other materials. It contains *no* toxic creosols or other tar oils that require SARA title III, Section 313 reporting.

Be certain to read and understand the application procedure on the reverse of this sheet prior to using Ultra-Descaler.

#### Typical Properties:

Composition	Water based solvent containing wetting agents, corrosion inhibitors, and degreasing compounds.
Appearance	Brown in color
Odor	Scented—Fruity
Specific gravity	1.02—1.04
Bulk density	8.67 lbs./gal.
Viscosity	Water-like
Flash point	None
Hydroscopic Tendency	None
Foaming Tendency	Slight (controlled)
Solubility in Water	Complete
Hard Water Tolerance	Dissolves hard water salts
Rinsibility	Good (hot or cold, as long as surface is not allowed to dry first)
Phosphate free	Yes
Biodegradable Surfactants	Yes
Working Concentration	50% by volume with water to "as is"
Working Temperature	Ambient
Effect on metals	None on copper base metal, but removes oxide; deteriorates aluminum, zinc, and magnesium at various rates at full concentration.
pH	2.0

#### HEALTH & SAFETY

To obtain an MSDS on this or any other Ultrachem product, please contact your representative.

#### TECHNICAL SUPPORT

To learn more about Ultrachem products and applications please contact us at [info@ultracheminc.com](mailto:info@ultracheminc.com)



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### APPLICATION PROCEDURE:

For Descaling: Ultra-Descaler may be diluted as desired for use between by 50% volume with water to full strength for heavy accumulation of hard-water scale. It may be used at room temperature. Note that not all hard-water scale is identical in composition. If results attained using Ultra-Descaler are not as expected, submit a sample to our lab for testing and further recommendations.

When charging an enclosed system, Ultra-Descaler should be introduced gradually through a bottom inlet so that all cavities will be filled without forming gas pockets. Air pressure should be released until the system is full of the descaling solution. Provision must be made to vent gases formed during the descaling process. A vent hose or line should be attached to the top outlet of the equipment and led to a safe area where there are no open flames or sparks, or any possible contact with personnel.

Solution Control: Titrate solutions each half-hour to the point where two or more successive titrations show no further drop in solution strength. DO NOT mix or contact with chlorine release agents or anionic surfactants. Read MSDS before using. The simplest method is to use litmus paper.

Completion: Drain descaling solution and follow with a thorough water rinse and thorough neutralization.

Holding tanks of Ultra-Descaler solutions should be constructed of polyethylene, or other acid proof material.

**RECIRCULATING:** Use only acid resistant or expendable pumps. Recirculate intermittently (1 minute on and 10 minutes off) at a slow speed to avoid scouring the inhibitor film off the base metal.

**SAFETY & HANDLING:** Ultra-Descaler is corrosive when concentrated. Direct contact causes burns of skin and eyes. It is harmful if swallowed or inhaled. Use with adequate ventilation. Wear safety goggles, rubber gloves and other suitable protective clothing. Use of a respirator is recommended to avoid breathing vapor or mist.

**FIRST AID:** Eyes-flush with water for a minimum of 15 minutes (industry standard) separating eyelids with fingers. Get immediate medical attention. Skin-wash with soap and water. Ingestion- Do not induce vomiting. Drink water, Milk of Magnesia. Seek medical attention. Inhalation- Move to fresh air.

**KEEP OUT OF REACH OF CHILDREN. PLEASE READ AND UNDERSTAND THE MATERIAL SAFETY DATA SHEET FOR THIS MATERIAL PRIOR TO USE.**

**PACKAGING:** 5 gal. poly pail—Net Wt: 48# 330 gal. IBC tote – Net Wt: 3,000# 55 gal. poly drum – Net Wt: 500#

**SHIPPING:** Ultra-Descaler may be shipped under the following D.O.T. Classification:  
Class 65—Compounded cleaning liquid. Tariff Code—3402.90.50--30

**HMIS INDEX:** Health: 1 Flammability: 0 Reactivity: 0

**STORAGE:** Store container in a cool, dry location. Protect from possibility of physical damage from impact by fork trucks and other heavy equipment. To avoid injury, loosen bung slowly to relieve any pressure buildup. Keep container closed when not in use.

**DISPOSAL:** Neutralize solutions with spent alkaline material, lime or soda ash, dilute and discharge in accordance with federal, state and local regulations. Some regulations may allow disposal down drains once product is neutralized. However, some product may contain metal residues that may not be allowed down drains.

Rydlyme® is a registered trademark of Apex Engineering Products Company. Sublime® is a registered trademark of Summit.

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