Liquid Scale Dissolver is a powerful blend of hydrochloric acid and low-foaming corrosion inhibitors with a built-in pH color indicator. Use it to remove calcium carbonate (lime scale) and corrosion deposits (iron oxide) quickly and efficiently from evaporative condensers, cooling tower systems and shell and tube condensers. It will safely descale copper, steel, iron, brass, wood, rubber and plastic equipment. The acid in Liquid Scale Dissolver may damage or remove the zinc from galvanized metal, releasing flammable hydrogen gas. Imperial Scale Remover is recommended for these surfaces. For aluminum or stainless steel surfaces, Nu-Calgon's Eco-Lyme® is recommended.

Closely supervise the entire cleaning operation. Do not leave Liquid Scale Dissolver in the system longer than is necessary to remove scale build up, and never longer than 6 hours. Be careful about cleaning systems which may have corroded to the extent that metal is held in place with scale or corrosion products. When these deposits are removed, leaks may develop. Vent tanks and closed systems to prevent the build up of pressure and possible rupture (explosion) caused by carbon dioxide gas which is released by the action of acid on lime scale. Make sure that the recirculating water containing Liquid Scale Dissolver will not be carried away by air or be drained or splattered on personnel, surrounding concrete surfaces, grass, plants, automobiles or other surfaces which might be damaged by acid solutions.

## **DIRECTIONS FOR USE:**

Goggles, gloves, and other protective garments should be worn when using this product. Drain water from sump and flush out system to remove loose scale and sludge. Fill system with fresh water, adding one gallon of Liquid Scale Dissolver for every 20 gallons of water in the system. Allow acid to circulate until all scale is removed. At first the strong acid solution will be green. A blue or purple solution indicates that all of the acid has been neutralized by reacting with lime and that another full dose of Liquid Scale Dissolver is needed. After every third addition of acid, flush the system and add fresh water before dosing again. The system is free of scale when the solution retains its green color for 30-45 minutes (if it is not possible to observe the solution color, use the pH test strips included with the package to determine whether the solution has been neutralized). After cleaning, thoroughly rinse system with flowing water, making sure any residues from the process have been thoroughly flushed.

4330-01 (43301)

## **Nu-Calgon**

## Liquid Scale Dissolver

FOR SCALE & CORROSION REMOVAL

With Superior, Low Foaming Corrosion Inhibitors and pH Color Control



Cooling Towers, **Evaporative Condensers**, **Closed Chilled Water Systems** and Hot Water Boilers

FOR PROFESSIONAL USE ONLY





## DANGER

Harmful if swallowed. Toxic if inhaled.

Causes severe skin burns and eye damage.

May cause respiratory irritation. May cause drowsiness or dizziness.

PREVENTION: Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Do not breathe dust/fume/gas/mist/vapors/spray. Wear protective gloves/protective clothing/eye protection/face protection.

**RESPONSE:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing, Immediately call a POISON CENTER or doctor/physician. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. IF SWALLOWED: Rinse mouth, DO NOT induce vomiting, Drink plenty of water. Immediately call a POISON CENTER or doctor/physician.

STORAGE: Keep out of reach of children. Store in a well-ventilated place. Keep container tightly closed. Store locked up.

**DISPOSAL:** Disposal should be in accordance with applicable regional, national and local laws and regulations.

Right To Know: Water (7732-18-5), Hydrochloric Acid (7647-01-0). None (0%) of the mixture consists of ingredient(s) of unknown toxicity. This product has been evaluated and does not require warning labeling under California Proposition 65.

FOR SALE AND USE ONLY IN INDUSTRIAL, COMMERCIAL, AND INSTITUTIONAL MARKETS.

USA



THIS PRODUCT CAN BE USED IN MEAT, POULTRY, AND OTHER FOOD PLANTS THAT ARE GOVERNED AND INSPECTED BY THE U.S.D.A.

2611 Schuetz Rd. St. Louis, MO 63043 Customer Service: 800-554-5499 Chemical Emergency: 800-424-9300

Nu-Calgon

www.nucalgon.com (918) Calgon is a licensed trade name.

55 U.S. Gallons (208.2 Liters)