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UltraScale-Away Waterside Descaler

ULTRASCALE-AWAY SPECIFICATIONS:

1. **UltraScale-Away** is a non-toxic, non-corrosive, non-flammable, non-injurious tar oil base solvent, heavily fortified wetting and penetrating agents used for the rapid removal of water scale, lime and rust deposits found on the water side of any equipment that is water cooled, water heated or water operated, in any matter.
2. The solution is non-toxic, non-corrosive, non-flammable and non-injurious to any personnel when used as directed at any temperature within operating limits. (Not to exceed 180°F/82°C.)
3. The solution is non-toxic, non-corrosive, non-flammable and non-injurious to any metal found in water systems (see paragraph 4).
4. The exception to paragraph 3 is aluminum, magnesium and some alloys of stainless steel. These metals will oxidize and, with a few exceptions, discolor. It is therefore not recommended for use with concentrated **UltraScale-Away** solutions.
5. The solution has the ability to dissolve approximately two pounds (1 Kilo) of calcium carbonate scale per U.S. gallon while at 70°F/21°C and in concentrated form.
6. The solution is of pleasant odor and does not exude any obnoxious, unpleasant or toxic vapors when dissolving water scale, lime and rust deposits.
7. The solution has a Specific Gravity of 1.045.
8. The solution has a vaporization temperature of 213°F/100°C.
9. The solution does NOT have an Open or Closed Cup Flash Point.

10. **UltraScale-Away** is an electrolyte, as are most cleaning agents. An electrolyte is any liquid that will transfer small electrical currents. Examples: Salt Water, Vinegar and Coca Cola.

An electrolyte may cause plating in some types of equipment. This means a transfer of small amounts of one metal onto another metal. In some instances a thin coating of copper may be plated onto a steel drum while circulating an electrolyte such as **UltraScale-Away**.

The only time plating occurs is when two different metals are in a electrolyte solution. Some alloys of stainless steel are known to discolor and react galvanically in concentrated **UltraScale-Away** solutions. To minimize this, use a diluted **UltraScale-Away** solution.

11. The solution has the properties to be mailed or shipped by any private or commercial carrier without restrictions. **UltraScale-Away** may be shipped same day by air carriers for emergency deliveries.
12. The solution does not corrode, erode, attack, pit, oxidize or have other deleterious affects on metals or materials:
- | | | | |
|---------------|--------------|----------------|-------------|
| COPPER | FIBER | LEATHER | IRON |
| CHROME | STEEL | RUBBER | LEAD |
- or other materials or metals found in boilers, pipes, valves, pumps, strainers, radiators, convectors, unit heaters, heat exchangers, engines, evaporators, turbines, condensers and/or other water heated, water cooled or water operated equipment when used as directed.
13. The solution has the ability to dissolve deposits from some equipment while in operation and without shutdown, if auxillary coolers are incorporated.
14. The solution has the ability and effectiveness to be used at room temperature (50°F/10°C-75°F/24°C) with full results obtainable.
15. It is recommended the **UltraScale-Away** be diluted 50% or more when cleaning chrome as some chrome will discolor.
16. The solution does not develop a substantial increase in temperature while dissolving water scaled, lime rust deposits.
17. It is recommended that **UltraScale-Away** solution be thoroughly mixed in drum before using.
18. The concentrated solution can be held safely, in the open hand, without deleterious affects.
19. The solution does not freeze, slush or thicken at any temperature above 0°F/- 18°C.
20. The solution is not recommended for use at temperatures exceeding 180°F/82°C.

21. The solution does not deteriorate, oxidize, saponify, thicken or lose effectiveness for at least five years.
22. The solution does not require neutralizers as it is free rinsing with water.
23. The foregoing specifications are applicable to our product, **UltraScale-Away**, when used accordingly to instructions available upon request and in NO WAY are intended to cover other uses or applications by the purchaser.
24. Do not circulate material for more than a four hour period without consulting the manufacturer. Most **UltraScale-Away** cleanings can be accomplished in an average of two hours. Please use material only as directed.
25. The solution is packaged and shipped in single gallon, 4 gallon cartons, 5 gallon jugs, 30, 55 and 330 gallon non-returnable drums.

The solution is biodegradable with a BOD value of 16 mg/liter. This allows for expended solution to be disposed of through regular sewers.