

1. HydroSkrub is a non-hazardous, non-corrosive, non-injurious, non-toxic, yet fully biodegradable descaler, heavily fortified with wetting and penetrating agents which actually dissolves water scale, lime, mud, rust, and other water formed deposits from water operated equipment.
2. Certified to NSF/ANSI 60 for use as a cleaner in potable water systems. NSF Registered for use in beverage, pharmaceutical, bottling, poultry, and other food processing plants. USFDA has no jurisdiction over the product, since it does not come in direct contact with food.
3. HydroSkrub is non-corrosive, but the application of HydroSkrub may expose pre-existing under deposit corrosion (pitting, holes or similar damage) that can expose leaks in pipes, equipment or systems.
4. HydroSkrub should be used as directed and at any temperature within the operating limits of between 0°F / -18°C and 180°F / 82°C. If the solution does freeze, slush or thicken at the lower operating temperatures, and then thaws, there will be no performance reducing results. Please consult AERCO International when temperatures above 180°F / 82°C are encountered.
5. The solution does not deteriorate, oxidize, saponify, thicken or lose effectiveness for at least five years.
6. Although almost any chemical reaction will react faster under elevated temperatures, HydroSkrub should be applied at ambient temperatures (65°F / 10° C to 95°F / 24°C) with full effectiveness and results obtainable.
7. The solution is exothermic, but does not develop a substantial increase in temperature while dissolving water scale, lime, mud, rust or other water formed deposits. However, when HydroSkrub comes in contact with strong caustics, a significant exothermic reaction could result with temperatures potentially exceeding 140°F / 60°C.
8. HydroSkrub 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. If the HydroSkrub is diluted, it will still dissolve two pounds per gallon, but will require additional circulating time.
9. The concentrated solution can be held, safely, in the open hand without deleterious affects. However, if irritation occurs, a simple soap and water rinse is all that is required. If irritation persists, please consult a physician.
10. The solution is of a pleasant or characteristic odor, very similar to roasted almonds, and does not exude any obnoxious or toxic vapors.
11. An exception to number 10 is that hazardous vapors may occur when encountering high concentrations of sulfur, chlorine, or liquid TNT. Please contact the manufacturer before proceeding under these circumstances or review the MSDS of the chemical that HydroSkrub may come in contact with for incompatibilities.
12. HydroSkrub does not corrode, erode, attack, oxidize or have other deleterious affects on virtually any metal or materials commonly found in water systems such as:

COPPER
RUBBER

FIBER
STEEL

LEATHER
TITANIUM

IRON
GLASS

or other materials found in heat exchangers, vacuum pumps, evaporators, condensers, and/or other water cooled, water heated, or water operated equipment when used as directed.

13. An exception to number 12 is that when using 100% concentrated (non-diluted) HydroSkrub on magnesium, zinc, and/or aluminum, it could oxidize or pit. Furthermore, polished chrome and some alloys of stainless steel could become discolored. It is not recommended for use with concentrated solutions. The rule of thumb is that if the alloy is designed for use in a water system (aluminum engine block, aluminum mold, etc.), the alloy should be compatible with the HydroSkrub solution. Otherwise, it is recommended that the HydroSkrub be diluted 50% or more with water when cleaning.

14. Before commencing a cleaning job utilizing HydroSkrub, all flexible or corrugated stainless steel should be temporarily replaced with rubber or similar hosing.
15. It is recommended, but not mandatory, that the HydroSkrub solution be thoroughly mixed before using. Some settling of a dark precipitate may occur with the majority of the liquid becoming a clear amber color. The use of the phased or non-agitated liquid will have no negative affects upon the performance of the solution.
16. The solution does not require neutralizers and it is free rinsing with water.
17. HydroSkrub is an electrolyte, as are most cleaning agents. An electrolyte is any liquid that will transfer small electrical currents. Examples: salt water, vinegar, 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 according to the galvanic corrosion chart. In some instances, a thin coating of copper may be plated onto a steel drum while circulating an electrolyte such as HydroSkrub. The only time plating occurs is when two dissimilar metals are in an electrolytic solution.

If, for instance, Copper (0.35V) is reacting with material that is at a higher Anodic index it is the copper that will be plated.

In an AERCO product, the KC1000 Heater for example, the Naval Brass nozzles (0.45V) would etch and coat the CuNi. The effect is very slight since the Brass and Cu-Ni material's anodic index numbers are close. The impact is negligible to the life of the components in solution.

18. The solution has the properties to be mailed or shipped by any private or commercial carrier without restrictions. Air carriers for emergency deliveries may ship HydroSkrub via next day air.
19. The solution is packaged and shipped in 5-gallon jugs, 30 and 55-gallon drums, and 330 gallon totes.
20. Do not circulate material for more than a six-hour period without consulting AERCO International or the equipment manufacturer. Most HydroSkrub cleaning applications can be accomplished within an average of two to four hours. Please use material only as directed.
21. HydroSkrub is designed to be used by itself or diluted with water and water only.
22. Agitating or circulating HydroSkrub with compressed air is not recommended.
23. The solution is biodegradable with a Biochemical Oxygen Demand value of 16 mg/l. This normally allows the solution to be water flushed down plant sewers. Check with local ordinances and regulations in your area prior to disposal.
24. HydroSkrub is non-reportable under SARA Title 3: Sections 311/312/313 Categorization. HydroSkrub does NOT contain any toxic creosols or other hazardous substances not listed in our current MSDS. HydroSkrub does NOT contain any VOC's. HydroSkrub is not reportable under CERCLA.
25. The foregoing specifications are applicable to our product, HydroSkrub, when used according to instructions that are available upon request and in NO WAY are intended to cover other uses or applications by the purchaser.

For additional details regarding the specifications of HydroSkrub, please contact the technical department of AERCO INTERNATIONAL, INC. @ 201-768-2400 .