

Piranha

Descaler

Specifications

Dissolves water scale, lime, rust, and mud safely, quickly and effectively!

Phone: 281- 687- 4995 www.piranhawaterproducts.com

Piranha Descaler dissolves water scale, lime, mud and rust deposits safely, quickly and effectively!

1. ***Piranha Descaler*** is a non-hazardous, non-corrosive, non-flammable, 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. ***Piranha Descaler*** is non-corrosive, but the application of ***Piranha Descaler*** may expose pre-existing under deposit corrosion (pitting, holes or similar damage) that can result in leaks in pipes, equipment or systems.
3. ***Piranha Descaler*** 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 the manufacturer when temperatures above 180°F / 82°C are encountered.
4. The solution does not deteriorate, oxidize, saponify, thicken or lose effectiveness for at least five years.
5. Although almost any chemical reaction will react faster under elevated temperatures, ***Piranha Descaler*** should be applied at ambient temperatures (65°F / 18°C to 95°F / 35°C) with full effectiveness and results obtainable.
6. 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 ***Piranha Descaler*** comes in contact with strong caustics, a significant exothermic reaction could result with temperatures potentially exceeding 140°F / 60°C.
7. ***Piranha Descaler*** 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 ***Piranha Descaler*** is diluted, it will still dissolve two pounds per gallon, but will require additional circulating time.
8. 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.
9. The solution is of a pleasant or characteristic odor, very similar to roasted almonds, and does not exude any obnoxious or toxic vapors.
10. An exception to number 9 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 ***Piranha Descaler*** may come in contact with for incompatibilities.
11. ***Piranha Descaler*** 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.

12. An exception to number 11 is that when using 100% concentrated (non-diluted) **Piranha Descaler** 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 **Piranha Descaler** solution. Otherwise, it is recommended that the **Piranha Descaler** be diluted 50% or more with water when cleaning.
13. Before commencing a cleaning job utilizing **Piranha Descaler**, all flexible or corrugated stainless steel should be temporarily replaced with rubber or similar hosing.
14. It is recommended, but not mandatory, that the **Piranha Descaler** 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 effects upon the performance of the solution.
15. The solution does not require neutralizers and it is free rinsing with water.
16. **Piranha Descaler** 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 **Piranha Descaler**. The only time plating occurs is when two dissimilar metals are in an electrolytic solution.
17. The solution has the ability to dissolve deposits from some equipment while in operation and without shutdown, either through the cooling tower or if auxiliary coolers are incorporated.
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 **Piranha Descaler** via next day air.
19. The solution is packaged and shipped in 32 oz. spray bottles, single gallon containers, 4x1 gallon cases, 5-gallon jugs, 30 and 55-gallon drums, 275 and 330 gallon totes, and 550 gallon mega containers with lifting lugs.
20. Do not circulate material for more than a six-hour period without consulting the manufacturer. Most **Piranha Descaler** cleaning applications can be accomplished within an average of two to four hours. Please use material only as directed.
21. **Piranha Descaler** is designed to be used by itself or diluted with water and water only.
22. Agitating or circulating **Piranha Descaler** with compressed air is not recommended. Please consult the manufacturer with any questions.
23. The solution is biodegradable with a BOD 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. **Piranha Descaler** is non-reportable under SARA Title 3: Sections 311/312/313 Categorization. **Piranha Descaler** does NOT contain any toxic creosols or other hazardous substances not listed in our current MSDS. **Piranha Descaler** does NOT contain any VOC's. **Piranha Descaler** is not reportable under CERCLA.
25. The foregoing specifications are applicable to our product, **Piranha Descaler**, 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 **Piranha Descaler**, please contact the technical department at 281 687-4995.*