

Calcium Carbonate Dissolving Power			
CleanScale	9.8		
Muriatic	8.4		
Urea HCI	7.2	3	
Sulfonic	6.9		

Percent of Calcium Carbonate dissolved with 3 minutes exposure. CleanScale contains no Urea HCl, organic salts or traditional acids.

# CleanScale Marine & Industrial Biodegradable D-Scaler

CleanScale is a powerful biodegradable non toxic, non DG descaler designed to safely and effectively remove rust, lime and scale from heat exchangers, pumps, pipes compressors, water cooling towers and other industrial and marine equipment without damaging the base materials.

CleanScale chemically dissolves the toughest rust scale and lime deposits that build up on the walls of water-based equipment over time. The resulting products are water soluble inorganic salts that can be flushed from the system with water.

## **Benefits**

- Biodegradable
- Dissolves Rust, Lime and Scale
- Safe & Fast
- Cost Effective
- Simple to use
- Cleans Up with Water

## **Application Details**

#### **Dilution rate**

For a standard application dilute CleanScale at a rate of 1 part CleanScale and 2 parts water.

Recirculate and monitor the product hourly. Once finished rinse the system with water. CleanScale can be used at our recommended dilution rate or more concentrated solutions can be used and will work faster but may be uneconomical in situations where deposits are light or large volumes of product are required. Each application should be assessed on its own merits taking into account such factors as degree of scaling, frequency of cleaning, type of scale and working temperature. Agitation or re-circulation of the CleanScale solution assists in achieving the best results.

A typical cleaning application with CleanScale takes 1 to 2 hours at ambient temperature (20 to 30°C). Under cold conditions or in situations where very heavy deposits are present, longer times may be required. If high temperatures (>45°C) are employed, cleaning times may be considerably reduced. CleanScale can be used in practically any water based equipment or system including heat exchangers, condensers, cooling towers, evaporative condensers, engine cooling systems, compressors, pumps & piping.

CleanScale at the recommended dilution rates does not corrode, erode, attack, oxidize or have other deleterious effects on virtually any metal or materials found in marine water systems such as: brass, copper, copper nickel, iron, steel, fibraglass, titanium, plastics, ceramic, glass, painted surfaces teflon, rubber, gel coats, carbon & wood.

When using 100% undiluted CleanScale: caution should be taken for applications with aluminium, magnesium or zinc. Polished chrome and some stainless steel alloys may be discoloured by CleanScale.

To confirm compatibility prior to use always test CleanScale on a sample comparable material.

### **Cleaning Volvo Heat Exchanger**

Description: 40 litres of warm water @ 50 degrees and 20 Litres of CleanScale.

The solution was in an open container and agitated for the entire 3 hours with a small pump.

Rowan from Aquadisiac Marine commented, "Other leading brand D-scalers would take about 6 hours to do the same job and would also turn the core a pink colour. Aquadisiac now uses CleanScale for all their D-Scaling work."



Volvo Heat exchanger before being treated with CleanScale.



Volvo Heat Exchanger after 1 hour treatment of CleanScale.



Volvo Heat Exchanger after 2 hour treatment of CleanScale.



Volvo Heat Exchanger after 3 hour treatment of CleanScale.

#### Conditions of sale

Natural Water Solutions Pty Ltd warrants that this product conforms to its chemical description and Natural Water Solutions Pty Ltd will replace this product if found to be faulty as a result of the manufacturing procedure. As the use of this product is beyond the control of the manufacturer, no warranty is either expressed or implied and no liability is accepted for any damage or injury arising from its use.

Unit 6/7 Prindiville Drive Wangara 6065 www.nwsolutions.com.au Tel: (08) 9242 2667 Fax: (08) 9409 3511 Email: info@nwsolutions.com.au

