



## DESCALER POWDER™

### DESCRIPTION

**DESCALER POWDER** is an advanced acid concentrated dry powder formula consisting of a blend of specific acids, wetting agents, corrosion inhibitors, antifoam agents and a color indicator. Its purpose is to remove hard scale and rust deposits from water boilers, diesel engine cooling systems, condensers, evaporators, heat exchangers, pipeline collection systems, etc.

**DESCALER POWDER** is similar to **DESCALER LIQUID 555** as to its properties and range of applications. However, the difference lies over the fact that **DESCALER POWDER** is a dry powder formula, which makes it easy and safe to handle and store in awkward conditions. Furthermore, **DESCALER POWDER** is safe to use on sensitive metals and their alloys such as Zinc, Lead, Aluminum, Tin etc.

### ADVANTAGES AND CHARACTERISTICS

- ◆ Highly effective for the complete removal of rust and scale deposits from water boilers, engine cooling systems and other water processing units and installations, due to its wetting agents.
  - ◆ Acts quickly and thoroughly.
  - ◆ Requires no heating unless its activity is required to increase drastically.
  - ◆ Due to its strong corrosion inhibitors, it is applicable to all ferrous metal surfaces and parts, as well as those being galvanized and those made of Tin, Zinc, Lead, Aluminum etc.
  - ◆ Contains anti-foaming agents and a color indicator as a determinant agent of the strength of the powder.
  - ◆ Water-soluble, non-flammable, non-volatile and non-hygroscopic.
  - ◆ Has no known effect on rubber and plastic compounds.
  - ◆ May be combined with a specific range of other products.
  - ◆ Can be used for difficult cleaning conditions such as the lavatories, showers, biological wastewater treatment units etc.
  - ◆ Cost effective, easy to handle, apply and store.
- ▶ **DESCALER POWDER** is not harmful to the marine environment as per MARPOL MEPC 63 Annex V Amendment [MEPC. 71/17/Add.1 Annex 21, Resolution MEPC 295 (71)].

### PHYSICAL PROPERTIES

**DESCALER POWDER** is a concentrated, highly acidic powder compound containing a blend of strong acids, wetting agents, corrosion inhibitors, anti-foam agents and a color acid indicator.

<b>Appearance/Color</b>	: Reddish powder
<b>Specific gravity</b>	: 1.3 - 1.4 gr/cm <sup>3</sup> at 20°C
<b>Solubility</b>	: Moderate, slow reaction
<b>pH value (10% Solution)</b>	: 1.0 - 2.0
<b>Odor</b>	: Odorless

### PACKAGING

Order Number	: 832509 (25 kgrs).
Container	: Plastic drum.

### APPLICATION AND USE

#### A. Dosing Procedure

The quantity of **DESCALER POWDER** to be used corresponds to the scale and degree of contamination, the available downtime, the desired results and the system to be treated. Therefore, the concentration of the applied solution must be made after considering the above parameters. However, **DESCALER POWDER** is recommended for use at a quantity proportion of 4–5kgs for every 100litres of fresh water.

#### B. Preparation

There are certain actions, which must be taken before applying **DESCALER POWDER**. These are the following: Dissolve the powder in fresh water at a concentration of 4–5%.

Before the application of the solution, rinse the area to be treated thoroughly with water in order to eliminate sludge and other loose deposits

#### C. Cleaning Procedure

**DESCALER POWDER** may be used either at room temperature or can be heated up to no more than 60 °C in order to increase its activity and reduce the reaction rate.

The methods to use are circulation, soaking and spreading.

**Circulation** is applicable to boilers, evaporators, condensers, heat exchangers and generally closed systems that have the capability to circulate at a temperature of approximately 45–60°C, for 6–15 hours.



**Soaking** is usually applicable in open or closed systems that do not provide circulation. In these cases, two or three cleaning trials are recommended beforehand. Generally, a solution of 20%, at 45–55°C, should be used; it must not stand still, and should have periodic agitation. This ensures constant reaction rate. At the same time we must maintain the strength of the desired acidity by adding **DESCALER POWDER** and fresh water solutions, periodically, in order to make up for the lost volume proportion due to steam loss and surface reaction.

**For general cleaning** on large surface areas, conventional means such as a brush, sponge or a mop with **DESCALER POWDER** are suitable. The concentration of the solution should depend on the degree of contamination and the kind or type of deposition.

After the completion of the cleaning process, regardless of the method used, rinse with plenty of water and neutralize (only for the metal surface areas) with 1% solution of **ALKALINITY CONTROL**.

► **Note** that during application, due to the dissolving of the scale deposits, inflammable and/or toxic gases may be liberated. In this case, adequate ventilation is necessary.

## ! SAFETY AND HANDLING

<b>HANDLING</b>	Handle with care. Store in a dry, cool and well ventilated environment.
<b>SAFETY</b>	IMMEDIATE ACTIONS
<b>Eye Contact</b>	Avoid Eye contact. Otherwise, flush with plenty of water for a few minutes. Seek medical attention.
<b>Skin Contact</b>	Avoid Skin contact. Otherwise, wash contaminated area thoroughly with water. Seek medical attention.
<b>Inhalation</b>	Do not breathe gas/vapors. Otherwise, seek fresh air source at once. Seek medical attention. In case of insufficient ventilation, wear suitable respiratory equipment.
<b>GENERAL INSTRUCTIONS</b>	Avoid mishandling. Precautionary measures for body protection are strongly recommended before use.

 **Read the Material Safety Data Sheet before using this product.**

For detailed information on safety and health, please refer to Material Safety Data Sheet and/or Product Label.

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