



DESCALER LIQUID 555™

DESCRIPTION

DESCALER LIQUID 555 is a superior, heavy duty, concentrated liquid acid solution specifically designed to remove rust and water scale build-up from boilers, evaporators, heat exchangers, cooling systems, pipe-line collection systems, etc.

DESCALER LIQUID 555 is characterized by the composition of high quality raw materials and the quick and effective results once applied.

ADVANTAGES AND CHARACTERISTICS

- ◆ Ideal for the complete removal of scale and rust accumulation.
 - ◆ Acts quickly and thoroughly without the necessity for heating.
 - ◆ Applicable to all ferrous metal surfaces and parts, except stainless steel surfaces, those being galvanized and those made of Tin, Zinc, Lead and Aluminum.
 - ◆ Water-soluble, non-flammable and non-volatile.
 - ◆ Has no known effect on rubber and plastic.
 - ◆ 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 apply and use.
- ▶ **According to MARPOL 73/78** chemical tankers are only permitted to use tank cleaning agents, which had been approved and evaluated by the International Maritime Organisation (IMO).
 - ▶ **DESCALER LIQUID 555** was evaluated in accordance with MEPC.1/Circ. 590 through IMO's Working Group on the Evaluation of Safety and Pollution Hazards of Chemicals (ESPH Working Group) and found to meet the requirements of regulation 13.5.2 of Annex II of MARPOL 73/78.
 - ▶ **DESCALER LIQUID 555** 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 LIQUID 555 is a concentrated, non-volatile, acid based, aqueous solution consisting of wetting agents, corrosion inhibitors, powerful descalers and a color indicator.

Appearance/Color	: Clear, red liquid
Specific gravity	: 1.15 - 1.17 gr/cm ³ at 20°C
Solubility in water	: Appreciable
pH value (1% Solution)	: 0.5 - 2.0
Odor	: Pungent

PACKAGING

Order Number	: 833009 (30 ltrs)
Container	: Plastic jerrican

APPLICATION AND USE

A. Dosing Procedure

DESCALER LIQUID 555 must be used diluted at a proportion of 1 litre for every 4–9 litres of water. Dilution must not exceed this proportion as it may alter the inhibiting effect of the solution.

- ▶ **Note** that after the application of **DESCALER LIQUID 555**, a 1% solution of **ALKALINITY CONTROL** must be used to neutralize the treated surface area.

B. Cleaning Procedure

Preparation: Before the application of **DESCALER LIQUID 555**, remove Tin, Zinc, Aluminum, Lead and galvanized parts/components from the surface area to be treated. Additionally, rinsing of the contaminated area is suggested in order to eliminate sludge and other loose deposits.

Application: **DESCALER LIQUID 555** may be used either at room temperature, or in order to accomplish quicker results, it can be heated up, but the temperature must be no more than 55°C.

The methods used are the 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 45–55°C, for 6–15 hours with a solution of 8–12% of **DESCALER LIQUID 555** in water. Keep in mind that the strength of the solution is analogous to the degree of contamination/accumulation.



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 LIQUID 555** and fresh water, 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 LIQUID 555** are suitable, either diluted or not, depending 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 inflammable and/or toxic gases may be liberated. In this case, adequate ventilation is necessary.

! SAFETY AND HANDLING

HANDLING	Handle with care. Store in a dry, cool and well ventilated environment.
SAFETY	IMMEDIATE ACTIONS
Eye Contact	Avoid Eye contact. Otherwise, flush with plenty of water for a few minutes. Seek medical attention.
Skin Contact	Avoid Skin contact. Otherwise, wash contaminated area thoroughly with water. Seek medical attention.
Inhalation	Do not breathe gas/vapors. Otherwise, seek fresh air source at once. Seek medical attention. In case of insufficient ventilation, wear suitable respiratory equipment.
If Swallowed	Avoid ingestion. Otherwise, consume a considerable quantity of water. Do not induce vomiting. Seek medical attention.
GENERAL INSTRUCTIONS	Avoid spillage, splashing and 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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