

# **DESCALING LIQUID**

**Acid Descaler for Water Scale and Rust Deposits** 

## **Technical Information**

## **Physical Data**

Appearance: Aqueous red
Specific gravity: 1.15 at 20°C.
Flash Point: None
pH (1% solution): 1

## **Description**

DESCALING LIQUID is a liquid acid compound containing descaling accelerators and corrosion inhibitors. It serves the following purposes:

- Removes hardness scale from water systems.
- ▶ Removes rust and rust scale from ferrous metals (except stainless steel).
- ▶ Improves heat transfer efficiency.
- Is inhibited against attack on ferrous metals.

## **Application**

This product is suitable for the removal of hardness scales from boilers, condensers, evaporators, heat exchangers, diesel engine cooling systems, air coolers on the sea water side, and more. It can also effectively remove rust scale from all ferrous metal surfaces.

### **Advantages**

The product offers the following advantages:

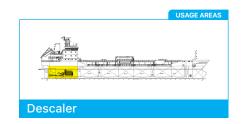
- ▶ Fast and efficient scale removal.
- Complete rust removal.
- Contains a descaling accelerator to increase product action.
- Contains a protective corrosion inhibitor to inhibit attack on ferrous metals.
- ▶ Highly concentrated product that can be rapidly rinsed.
- ▶ In-situ cleaning eliminates the need for extensive dismantling.

#### **Directions For Use**

Descaling can be accomplished through circulation for large components and systems, by in-situ soaking, or by soaking in an immersion bath for small components. The most effective method is circulation, as it ensures the renewal of the acid film in contact with the scale.

#### **Circulation Method**

- If deposits to be removed are covered with an oil or grease film, a
  degreasing treatment with a solution of 2% to 8% of ALKACLEAN,
  CARBON REMOVER, SEACLEAN with water should be used prior to
  descaling. Circulate for 4 to 6 hours at a temperature of up to 60°C.
- 2. After degreasing (where necessary), a descaling treatment of a solution of 10% to 20% of DESCALING LIQUID with water should be circulated for between 24 to 36 hours for hardness scale and 1 to 4 hours for de-







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rusting, depending on the nature and state of deposits.

- Ensure the circuit is vented at the highest point to release gases produced during the descaling operations.
- The product solution may be heated to increase the descaling process rate. DO NOT EXCEED 40°C, as chlorine gas may be liberated above this temperature.
- Check the acid concentration of the solution regularly. If it drops to less than half the initial concentration, regenerate the solution by adding more DESCALING LIQUID.
- Determination of the concentration may be found using an Acidity Test Kit (obtainable from Uniservice Unisafe).
- 7. By placing scale samples in easily observed positions, a check on the progress of the descaling operation may be made. When the samples are completely dissolved and effervescence has stopped, circulate for one more hour, then drain the system thoroughly.
- Rinse the system thoroughly with water, and then drain.
- To neutralize any remaining traces of acid and to passivate the circuit, circulate a 1% to 2% by weight solution of ALKALINITY CONTROL for 2 to 6 hours.
- Neutralize acidic effluents drained from the descaling solutions by using ALKALINITY CONTROL until an acceptable pH value is obtained.

#### Soaking Method

The procedure for the soaking method is similar to that for circulation, including degreasing, descaling (ensuring venting), rinsing, and neutralization. The same solution strength should be used. If agitation of the descaling solution can be practiced, this will help to renew the acid film coming into contact with the scale.

## Safety and Environment (HSE)

Uniservice Unisafe Srl have carefully developed their products to minimize the safety risks and environmental impact of using their products. However, Uniservice advises that, prior to using its products, users should read in detail the accompanying Safety Data Sheet and ensure that its products are applied within the required HSE regulations of the country in which the user operates. Best practice and safety requirements should be followed which will likely include method statements and risk assessments, together with any specific requirements of the user's own company HSE requirements.

## **Important Notice**

While the descriptions, designs, data and information contained herein are presented in good faith and believed to be accurate, this information is provided for your guidance only. Because many factors may affect processing or application/use, we recommend that you do a test to determine the suitability of a product for your particular purpose prior to use. No warranties of any kind, either expressed or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding products described or designs, data or information set forth, or that the products, designs, data or information may be used without infringing the intellectual property rights of others. In no case shall the descriptions, information, data or designs provided be considered a part of our terms and conditions of sale. Further, you expressly understand and agree that the descriptions, designs, data and information furnished by Uniservice Unisafe Srl hereunder are given gratis, and Uniservice Unisafe Srl assumes no obligation or liability for the description, designs, data and information given or results obtained, all such being given and accepted at your risk. Product images are for reference purposes only.

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