

# ULTRASAFE DESCALING LIQUID

Liquid Safe Descaler

## Technical Information

### Physical Data

Appearance:	Clear liquid
pH in solution with water:	< 2
Specific gravity:	1.430 kg/l
Solubility in water:	Complete

### Description

This is a water-soluble descaling compound based on diphosphonic acid and corrosion inhibitors. It easily dissolves water scale and works effectively in both hot and cold water. It improves heat transfer and is safe to use on steel, iron, and various alloys. This compound is non-toxic and non-explosive. At the end of the descaling reaction, it tends to flocculate the scale particulate.

### Application

- ▶ Descaling of diesel engine cooling systems.
- ▶ Cleaning and scale removal from coolers on the sea water side.
- ▶ Water scale removal from boilers, heat exchangers, evaporators, and more.
- ▶ Specially blended for new MSF evaporators.

### Directions For Use

Descaling can be accomplished by 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 by circulation, as it ensures the renewal of the acid film in contact with the scale.

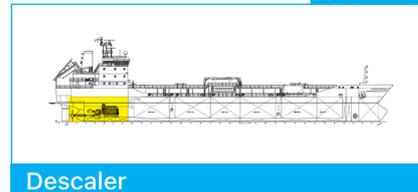
#### Soaking Method

The procedure is similar to that for circulation, i.e., degreasing, descaling (ensuring venting), rinsing, and neutralizing. 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; agitation can be achieved by the use of a small flow of compressed air.

#### Circulation Method

1. 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 before descaling. Circulate for 4 to 6 hours up to a temperature of 60°C.
2. After degreasing (where necessary), a descaling treatment of a solution of 3% to 5% by weight of ULTRASAFE DESCALING LIQUID with water should be circulated for between 24 to 36 hours for hardness scale, and 1 to 4 hours for de-rusting, depending on the nature and state of deposits. To avoid saturating the solution, do not exceed a solution strength of 8%.

#### USAGE AREAS



Descaler

#### PACKAGING



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3. Ensure the circuit is vented at the highest point to release gases produced during the descaling operations.
4. The product solution may be heated to increase the descaling process rate up to a maximum of 60°C.
5. Check the acid concentration of the solution regularly by observing its state. If effervescence disappears, the circuit should be drained, and a fresh charge introduced.
6. 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.
7. Rinse the system thoroughly with water, then drain.
8. To neutralize any remaining traces of acid and to passivate the circuit, circulate a 1% to 2% by weight solution of ALKALINITY CONTROL or BWT ONE SHOT for 2 to 4 hours.

Neutralize acidic effluents drained from the descaling solutions by using ALKALINITY CONTROL until an acceptable pH value is obtained (5.5 - 7).

## 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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