



## APPLICATIONS

**RUST AND DISCALE REMOVER** is suitable for removal of hardness scale and/or iron oxides from boilers, condensers, evaporators, heat exchangers, cooling systems etc. It must not be used on zinc, aluminum, galvanized materials, cast iron and stainless steel.

## DIRECTIONS FOR USE

RUST AND DISCALE REMOVER can be accomplished by circulation. For large components and systems, use in-situ soaking. For small components soak in immersion bath. The most effective method is by circulation as it ensures renewal of acid film in contact with the scale.

## CIRCULATION METHOD

If deposits to be removed are covered with oil or grease, a degreasing treatment with a solution of 2% to 8% of *ALKACLEAN*, *CARBON REMOVER*, *SEACLEAN* with water should be carried out prior to descaling. Circulate solution for 4 to 6 hours with a temperature of 60°C. After degreasing, start descaling treatment with a solution of 10% to 20% *RUST AND DISCALE REMOVER* with water. The solution should be circulated for 24 to 36 hours for hardness scale, and 1 to 4 hours for iron oxide scale, depending on nature and state of the deposits. Ensure circuit is vented at the highest point to release gases produced during the descaling treatment. Cleaning 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 1/2 initial concentration, regenerate the solution by adding more *RUST AND DISCALE REMOVER*. Determination of the acid concentration may be found using an *ACIDITY TEST KIT*.

The progress of operation may be followed by placing scale samples in easily observed positions, When the samples are completely dissolved and effervescence has stopped, circulate for one more hour then drain system thoroughly. Rinse thoroughly with water 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* until an acceptable pH value is obtained (normally needs 2 to 6 hour circulation or soaking).

## SOAKING METHOD

Procedure is similar to that for circulation, i.e. degreasing, descaling (ensuring venting), rinsing and neutralizing. The same solution strengths should be used. If the descaling solution can be agitated, this will help to renew the acid film coming into contact with the scale.

### **BRAIN CHEM INT PTE LTD**

Tel: +65 6268 1881 +65 6268 5867

Fax: +65 6268 2118

Email: chemsg@asiamarine.cc

Address: 50 Tuas Ave 11 #02-15 Tuas Lot  
Singapore 639107

## RUST AND DISCALE REMOVER

Heavy duty acid compound containing descaling accelerators and corrosion inhibitors

- Fast and efficient removal of scale and iron oxides
- Contains descalant accelerator to increase reactions
- Contains protective corrosion inhibitor against attack on ferrous metals
- Highly concentrated product
- In-situ cleaning eliminates need for extensive dismantling

For product characteristics and for the nature of special risks and safety advice consult our Material Safety Data Sheet.

This information is not to be taken as a warranty or representation for which we assume legal responsibility, nor as a permission, inducement or recommendation to practice any patented invention without a license. The information is offered solely for your consideration, investigation and verification.