

# CAFLON Safe RHC2

## Scale dissolver

### Overview

- **CAFLON Safe RHC2** is part of the “Environmentally Responsible” modified acid product line that minimizes the hazards, corrosion rates, and negative HS&E properties of HCl, while maintaining the positive aspects, such as solubilizing ability and reactivity rates. Utilized where more aggressive removal of formation, scale, or mineral deposits is required with ultra-low corrosion.
- **CAFLON Safe RHC2** is a strong, low-fuming acid alternative.

### Application

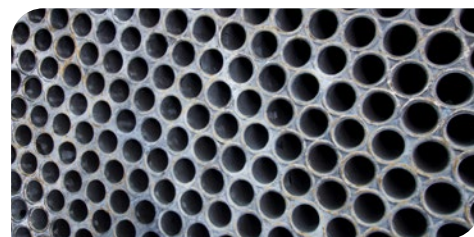
- **CAFLON Safe RHC6** is supplied as a concentrate and is typically diluted 1:1 with water at site (fresh or seawater)
- Chemical cleaning/scale dissolution in pipes, pipe-lines, cooling towers, boilers, heat exchangers, fire-water systems, seawater inlets, tubes, equipment, mill-scale etc.
- For removal of calcite, oxides (rust), mill-scale, mix-scale (mineral scale + hydrocarbons), and seawater scale in pipes, tubes, cooling towers, boilers, heat-exchangers, fire-water systems, during commissioning and maintenance.

### Value Add/Benefits

- Dissolves typical acid soluble scale (carbonates and iron oxides/rust, etc.) very efficiently
- Ultra-low metal corrosion
- Non-corrosive to skin tissue (HS&E safe)
- Clear: ultra-low fuming / vapor pressure
- Easy to deploy
- Similar solubilizing abilities as  $\approx 15\%$  HCl
- Class 1 acid package

### Standard Procedure (principle):

1. Prior to deploying the chemical, ensure that the system (chemical tank, hoses, etc.) has been checked for leakages.
2. Add the concentrate or a pre-mixed solution of the chemical into the chemical tank (circulation tank) to the desired level, and use the chemical in the tank to fill the pipe or equipment.
3. Alternatively, the chemical can be mixed 1:1 with water in the chemical tank.
4. No heating is required (but can be used) to activate the chemical.
5. Open the valves and start the pump.
6. Circulate for 90 to 180 minutes (or longer if required).
7. Drain, flush, and purge the pipe/equipment.
8. Repeat if necessary.



### Specifications

- Appearance: Clear amber liquid
- Specific Gravity:  $1.15 \pm 0.02$
- Freezing Point:  $-30^{\circ}\text{C}$
- Boiling Point:  $> 100^{\circ}\text{C}$
- pH:  $< 1$
- Solubility: 100% in water
- Thermal Stability:  $90^{\circ}\text{C}$
- Shelf Life:  $> 1$  year

### Dissolving Activity

Solubilizing ability of undiluted **CAFLON Safe RHC6**:

- $\text{CaMg}(\text{CO}_3)_2$  Solubility:  $\approx 195 \text{ kg/m}^3$
- $\text{CaCO}_3$  Solubility:  $\approx 220 \text{ kg/m}^3$
- $\text{FeS} \approx 165 \text{ kg/m}^3$

### Chemical Cleaning

**CAFLON Safe RHC6** is easy to deploy, practical, fast acting, and very efficient. The chemical is used as a concentrate (representing  $\approx 15\%$  HCl equivalent), or diluted 1:1 with water (fresh/seawater) and added to a chemical cleaning unit on site and spotted or circulated until the surface is clean.

A chemical cleaning unit is any suitable system or arrangement that has a tank for the chemicals, hoses, and pump for deploying the chemical.

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