

PRODUCT BULLETIN

ScaleSolv®

Non-Hazardous DeScaler

DESCRIPTION

ScaleSolv® is a line of non-hazardous, non-corrosive, non-DOT regulated de-scalers. It is designed to remove carbonate (CO₃) based deposits. It also has the ability to dissolve and remove deposits caused by corrosion by-products (e.g. iron oxides, iron carbonate, zinc carbonates).



Before and After - Immersion Only

The demonstration on the right uses a full strength of ScaleSolv®.

Note how it attacks the carbonate scale but not the skin.



- ScaleSolv® is designed for applications containing aluminum, galvanized, stainless, yellow metals, & carbon steel.
- ScaleSolvII® is designed for applications where indirect food contact and/or odor are a concern; cannot be used on galvanized metals.

BENEFITS

- Non-Regulated for transportation
- Non-Corrosive to skin and equipment
- Non-Hazardous and Biodegradable
- Prevents flash corrosion post cleaning
- Prevents dissimilar metal plating
- Safe to use on galvanized (with ScaleSolv®), aluminum, carbon, and stainless steel, copper, brass, and plastic

APPLICATIONS

ScaleSolv® is designed to dissolve carbonate deposits found in all types of water operated equipment, such as, boilers, cooling towers including galvanized towers, closed loops, heat exchangers, and aluminum molds. Some carbonate deposits may contain elements that cannot be dissolved by any safe acids, i.e., calcium phosphate, calcium acrylate, silica. So it is highly recommended that ScaleSolv® be tested on a small composite deposit sample to determine efficacy. If it dissolves the sample deposit completely or at least breaks it apart into smaller particles, then it is a good choice for the application.

DOSAGE

Depending on the characteristics of the deposits and the amount of cleaning time available, ScaleSolv® can be used at full concentration or diluted down to 25%. The initial pH of the cleaning solution should start at about 2.8. As the deposits are dissolved, the pH of the cleaning solution increases, and the solution becomes weaker. At pH of 3.8 and higher, the cleaning solution becomes very weak. When the pH is stable for over an hour (and it is below 3.8), it is usually an indication that most of the carbonate deposits have been dissolved. Inspect the equipment for cleanliness. Repeat the procedure if needed.

The complete removal of any deposits depends on several factors such as chemical composition, age, density, and quantity. For these reasons it is difficult to predict exactly the cleaning time or the amount of ScaleSolv® needed. But as a general rule, 1 gal of ScaleSolv® will dissolve 2.5-3.0 lbs. of calcium carbonate.

Prior to discharging to a sanitary sewer (not storm sewer), the spent cleaning solution must be treated properly according to the local, state, and federal regulations. Most regulations require the cleaning solution to be neutralized to a pH of 5 to 10. We recommend our UltraBuffer to neutralize the cleaning solution. The UltraBuffer is a non-caustic based buffer that is also non-corrosive, and biodegradable.

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