



# Dr. KlarX™ Calci-Cure

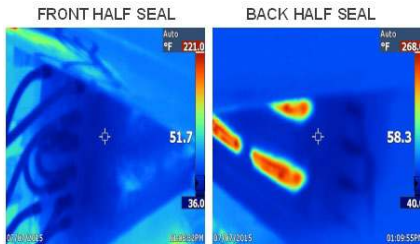
Non-Corrosive Mineral Dissolver & Cleaner

## Product Info

**Dr. KlarX™ Calci-Cure** is a low-pH cleaner alternative to harsh acids. It combines detergents and nano surfactants to effectively break down calcium, lime, rust, and other mineral deposits.

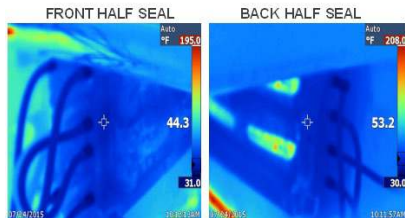
**Dr. KlarX™ Calci-Cure** is scientifically engineered with Nanoparticles that boost the effectiveness of our formula to rapidly penetrate and dissolve mineral deposits and rust without damage to sound metal, plastic, rubber, or synthetic hoses or cooling channels.

### MOLD BEFORE CLEANING



Large thermoplastic mold IR image **before** cooling channels cleaned with **Dr. KlarX™ Calci-Cure**.

### MOLD AFTER CLEANING



IR image **after** cooling channels cleaned with **Dr. KlarX™ Calci-Cure**. Cooler molds mean faster cycle time. Improved profits.

## Where to Use

- Clean Rust Stains and Mineral Scale
  - Fixtures
  - Pipes
  - Glass
  - Plastics
- Clean / Descale
  - Cooling Channels in Water Cooled Molds
  - Heat Exchangers/Radiators
  - Associated Plumbing
  - Drilling / Coring Pipe
  - Pumping Equipment
- Safely Clean Marine Engine Cooling System
- Safely Flush Automotive Radiators

## Features and Benefits

- 100% Acid-Free / 100% Biodegradable
- Safe on Piping and Pumping Equipment
- No Secondary Containment is Required
- No Disposal Restrictions
- Non-Toxic
- Non-Corrosive
- Non-Mutagenic for Marine Life
- Neutralizes Easily with Water

## Confirmed Testing

- **Toxicity Studies**
  - Toxicity Limits: Test Procedure OECD 202, 48 hr.
  - NON-TOXIC to LC50 and LD50
  - Mutagenicity Limits: OECD Guidelines Sec.471 Chemicals in **Dr. KlarX™ Calci-Cure** proven NON-MUTAGENIC
  - Dermal Irritation & Corrosion Test:
    - A modified Draize method was used per OECD Guidelines for the Testing of Chemicals Sec. 404 and complies with the requirements of OECD Principles of GLP, Annex revised as of July 1992
    - **Dr. KlarX™ Calci-Cure** gets a Primary Irritation Score of .09+/-0.2 and is classified as a "Very Mild Skin Irritant"
- **Biodegradation & Aquatic Safety**
  - **Dr. KlarX™ Calci-Cure** 100% Biodegradable - Test Procedure: Hach Reactor Digestion Method adaptation of the Standard Methods for Waste Water & Sea Water.
  - COD = Low Detectable Limits
  - BOD = No Detectable Limits
  - Ecological Study:
    - 96 hr. LC50: Flathead Minnow > 600 mg/1 = Non-Toxic
    - 96 hr. LC50: Rainbow Trout > 20mg/1 = Non-Toxic
- **Metal Studies**

Unlike acids, **Dr. KlarX™ Calci-Cure** is proven **NON-DESTRUCTIVE** to human skin

  - DOT Test Protocols: Section 173.1 54 Exceptions for Class 8 materials
- **Metal Test Limits**
  - **NON-CORROSIVE**. D.O.T. Classification Non-Corrosive < 6.25 mmpy. **Dr. KlarX™ Calci-Cure** = 0.23 mmpy. Result: Non-CORROSIVE
- **Classifications & Approvals**
  - D.O.T., TDG, IMO, IATA, IMDG, SARA 313 311/312, California Prop 65 Non-Regulated
  - USDA Authorization:
    - A1 – General Cleaners
    - A2 – Soak Tank, Stream/Mechanical Cleaners
    - A3 – Acid Cleaners
    - A4 – Floor and Wall Cleaners
    - A7 – Metal Polishes – Nonfood Contact
    - A8 – Degreasers / Carbon Removers
    - C2 – Toilet / Dressing Room
    - G6 – Boiler Treatment Products – All Food Processing Areas / Food Contact
    - G7 – Boiler Treatment Products – All Food Processing Areas / Nonfood Contact
  - **FDA**– Approved as Safe (GRAS): (CGMP) CFR 184, 1923
  - **Navsea**, US COAST GUARD, NOAA, and HRSD approved for direct disposal into VA Sewer System



*In both examples, **Dr. KlarX™ Calci-Cure** cleans rust from Stainless steel posts &*

## Use Instructions

- Clean with one of our specialized cleaners to remove soil, oils, and grease.
- Rinse to neutralize.
- Apply diluted **Calci-Cure™**, and let set for 1-3 min.
- Scrub with the grain of metal with white Scotch-Brite if necessary.
- Rinse thoroughly and let dry.
- Seal with Fortify to prevent re-rusting, soil accumulation, and corrosion and maintain luster longer.
- Determine the proper dilution rate with prior testing.
- Light Buildup: Dilute 4 oz per quart (32oz)
- Moderate Buildup: Dilute 6 oz per quart (32oz)
- Heavy Buildup: Dilute 8 oz per quart (32oz)
- Severe Buildup: Use undiluted

- **Size:** 1-gal, 2/1-gal, 4/1-gal, Pails, Drums, and Totes
- **Appearance:** Ambered colored deodorizing fragrance
- **Concentrate** – Dilute 4 oz to 8 oz per quart
- **pH:** 8-9
- Non-Hazardous and Non-Toxic
- Stable under normal ambient temperature condition

## Safety

As with all cleaning products, use protective wear (mask, gloves, and goggles to avoid skin and eye contact).