

RG-CHW[®] DATA & INSTALLATION



RG-CHW is a surface conversion compound utilizing mineralization technology, or the "science of Minetics." **RG-CHW** is gel compound which replaces the corrosion process by growing a mineral formation on and into the metal surface 50-200 angstroms thick. **RG-CHW** is a breakthrough for controlling **corrosion under insulation** (CUI). **RG-CHW** is a **non-drying** gel compound that is easily applied to pipes, fittings, valves, tanks and vessels. **RG-CHW's** non-skinning and non-sag properties make it a great solution for CUI on chilled water systems.

RG-CHW helps prevent corrosion and helps stop existing corrosion from advancing. It requires minimal surface preparation on corroded surfaces (SSPC-SP-2, Hand Tool Cleaning), which drastically reduces the overall cost of a system remediation without pipe replacement. (Integrity testing is recommended on corroded pipe).

Installation thicknesses of 25-30 MILS allows the unique formulation of the gel to heal a breach (mechanical damage) of the mineral barrier, and the **RG-CHW[®]** formula is **so unique**, that even if the vapor barrier is breached allowing some moisture into the system, the **RG-CHW** will buffer the moisture that migrates through the gel to an elevated pH.

The opacity and color of the product (light green) allows for easy site inspection of an installation.

Technical Information

USES:	Piping systems, valves, tanks, appurtenances, and vessels
SERVICE TEMPERATURE:	Above Freezing to 140°F. This product is not designed for continuous service below freezing or above maximum temperature limit. Call Polyguard for product recommendations on systems outside this temperature range.
APPEARANCE:	Creamy, tacky, gel feel
PROPERTIES:	V.O.C. = 0.031% w/w = 0.44 g/l Specific Gravity – Gravimetric; 1.0 - 1.2
CORROSION PROTECTION:	ASTM B117-18 Salt Fog Exposure - Rating 10-G per ASTM D610 after 1,000 hours exposure
SURFACE PREP:	SSPC-SP-2 - Rusted surfaces require removal of loose scale
APPLICATION:	Glove or brush applied to tanks, vessels, and appurtenances.
COVERAGE:	64 – 80 Sq Ft per gallon @ 0.025" (25 mils) to 0.030" (30 mils)
SAFETY:	Read SDS prior to use
SHELF LIFE:	In container; greater than two years, Air exposed on insulation; greater than one year.

Rusted Metal Surface Preparation

- Power Wash or wire brush, then clean the surface to remove all loose scale, grease and dirt, if it exists on the surface. A wash down agent may be required to remove chlorides from the corroded surface.
- Application can be adversely effected by wet surface conditions.
- Apply to surface; assuring coverage on pipes, crevice areas, threaded parts, or other components.
- Surface must be above freezing.

New Metal Surface Preparation

- Installation on metal surface without a coating on it is best.
- Unvarnished pipe may have a blush of red rust; don't worry about it! If there is pitting or scale, wire brush it off.
- Apply to surface; assuring coverage on pipes, crevice areas, threaded parts, or other components.
- Surface must be clean and free of oils and dust.
- Check with your safety department before installing on any hot surface above OSHA personnel protection standards.
- Surface must be above freezing.

Wet Surfaces

- All surfaces should be wiped to be as dry as possible prior to application of **RG-CHW**.
- Water displacement characteristics allow for application of product to damp surfaces, but not easily! A dry surface is best
- DO NOT apply to surface where severe rain conditions are present.
- Damp rusted surfaces should be cleaned with water soluble solvent (alcohol or glycol) before application.
- DO NOT apply to wet and soaked rusted surfaces where excessive water is present – even if the surface has been cleaned, use of an omni-directional fabric is required on wet surfaces.

Insulation Compatibility

- **RG** gel products are compatible with most insulation types. Elastomeric Foam insulations are not recommended unless they are in a half shell configuration (not a single split seam). Calcium Silicate or Perlite is not acceptable if the gel is not protected by a non-wicking membrane suitable for the temperatures it would be exposed to. **Polyguard** has tested specific brands of insulations for wicking properties. Call **Polyguard** if you have any questions concerning the insulation you are specifying, if we have not tested your selected brand, we welcome you to submit it for testing.

Clean-up and Disposal

- Recommended clean-up is with commercially available citrus cleaner followed by soap and water.
- Review the SDS and check with you local, state, and federal officials for proper disposal.

RG-CHW is not designed to be used systems over 140°F, or under freezing, or on aluminum substrates.

RG-CHW is not formulated to stop MIC corrosion, if MIC corrosion is present, Polyguard manufactures an MIC version of RG.