

RG-2400® NP Data & Installation



RG-2400 NP is an anti-corrosion gel utilizing Polyguard's patented mineralization technology, (the "science of Minetics"); this gel replaces the corrosion process with a mineral formation on and into the metal surface creating a mineral barrier 50-200 angstroms thick. As time passes, the mineral layer on top of the substrate increases slightly in thickness. A pH in the alkaline range passivates water vapor, and the hydrophobic nature of the gel repels water.

2400® NP is not "new" technology; it is a formulation designed for the insulation industry, under insulation for **NEW piping systems**, tanks and vessels. It is a non-drying compound easily brush/spray applied to pipes, fittings, valves, tanks and vessels. Its' non-skinning and non-sag properties make it a permanent solution.

RG-2400® NP prevents corrosion from occurring on new piping systems; it requires no preparation other than making sure there are no oils, dirt or rust on the piping. In addition, **RG-2400 LT** prevents stainless steel and copper stress crack corrosion under insulation.



The insulation contractor applies **RG-2400® NP** on the new pipe using PVC chemical gloves, then for even coverage remove the excess with the Patented AccuTrowel® tool (see data sheet for AccuTrowels). The opacity and color of the product (purple) allows for easy site inspection of an installation. When you cannot see the pipe through the purple gel, you should have sufficient coverage. It is assumed that any new piping will not be at any temperature above or below ambient.

RG-2400® NP is also "NON-TOXIC", and will NOT harm the environment. **RG-2400® Cleaner** is also available from **Polyguard**; this cleaner is specifically formulated to clean tools, equipment, and hands without harmful chemicals.

Technical Information

USES:	Piping systems, valves, tanks, and vessels
PROTECTION:	Corrosion test - 1000 hours in ASTM B117, thickness .025" Accelerated Weathering — ASTM G-23, pass, no corrosion
TEMPERATURE:	Up to 230°F sustained (below freezing has no effect)
APPEARANCE:	Creamy, tacky, gel feel
PROPERTIES:	V.O.C. — EPA Method; NONE Specific Gravity — Gravimetric; 0.95-1.03
SURFACE PREP:	Surface must be clean and free from rust, oil, water or contaminates; SSPC-SP2 or SSPC-SP3 depending on the condition of the new pipe.
APPLICATION:	Spray, glove, brush applied to tanks, vessels, and appurtenances.
COVERAGE:	Coverage is approximately 64-80 Sq Ft per gallon
CLEAN UP:	Material can be removed from tools using Polyguard RG-2400 Cleaner
SAFETY:	Protective gloves and eye protection, avoid prolonged contact with skin Slight paint-like and mild chemical odor - read SDS prior to use
SHELF LIFE:	In container; greater than two years, Air exposed on insulation; greater than one year
ENVIRONMENTAL:	No toxicity was observed during testing; Formulated from non-toxic materials with environmental stability

Rusted Metal Surface Preparation

- Not intended for use on rusted or corroded surfaces.

New Metal Surface Preparation

- Installation on metal surface without a mill scale varnish on it is best.
- New pipe may have a blush of red rust, wire brush any rust off the surface before applying **RG-2400® NP**.
- Brush or glove apply to surface, assuring coverage on pipes, crevice areas, threaded parts, or other components. remove the excess gel with the Patented AccuTrowel® tool (see data sheet for AccuTrowels).

It is not *Polyguard's* recommendation, but some contractors prefer increasing the bore of the insulation by 1/8" which facilitates the installation process; however, the difficulty of over-siizing the insulation bore for an entire job is not usually feasible or necessary.

Wet Surfaces

- All surfaces should be wiped to be as dry as possible prior to application of **RG-2400 NP**.
- 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 rainy conditions are present.
- If you attempt to apply the Gel to a wet surface, it will not stick; adhesion will be spotty at best.
- Polyguard does not recommend 'bore coating' the insulation.

Cold and Dry Surfaces

- Material can be applied to dry non-rusted, unfrosted surfaces as low as -30°, note that the product will be very thick and difficult to apply!
- Surface must be clean and free of oils or frost.

Hot Surfaces

- Pipe surface temperature should not exceed 120° F, check with the plant safety team before installing on any hot surface above OSHA personnel protection standards. Do not attempt to apply on a fresh hot weld.

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 unless the gel is protected by a non-wicking membrane suitable for the temperatures it would be exposed to such as *Polyguard's ZeroPerm®* vapor barrier. **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.

Safety

- There are no known hazards associated with the applications of any **RG** product.
- Chemical hygiene classified as an irritant.
- Hand and eye protection required — protective gloves, safety glasses.
- A respirator and goggles should be used for spray application.
- RG does not come out of your clothing; wear a disposable coverall when applying.

Clean-up and Disposal

- Recommended clean-up is **Polyguard RG-2400 Cleaner** then with dishwashing liquid and water.
- If RG-2400 Cleaner is not readily available, commercial citrus cleaners followed by dishwashing liquid and water will clean up any spills on a rooftop, the must be cleaned up immediately to avoid any staining of non-metallic surfaces.
- Disposal should be as a grease/oil type material.
- Use the SDS and check with your local and state officials for proper disposal.

Spraying **RG-2400 LT**

- Documentation for spraying **RG-2400 NP** are on file with **Polyguard**, call us for your specific needs.

RG-2400 NP is not designed to be used on aluminum or bronze substrates, any metal which an elevated pH can affect should not be coated with **RG-2400**.

RG-2400 NP is not formulated to stop MIC corrosion.

RG FAMILY OF PRODUCTS ARE PROTECTED BY NUMEROUS U.S. AND INTERNATIONAL PATENTS