CORRO-TECH GP
SURFACE-TOLERANT SOLVENT-BASED EPOXY PRIMER FOR DAMP & COLD CONDITIONS

CORRO-TECH GP is a high-performance, solvent-based epoxy primer specifically developed to provide long-term corrosion protection for steel and concrete structures, even in cold, damp, and moisture-laden environments. Its advanced surface-tolerant formulation enables application directly onto wet metallic substrates and green concrete, where conventional primers would typically fail.

By curing effectively at temperatures as low as 41°F, CORRO-TECH GP delivers reliable adhesion and early-stage corrosion resistance, ensuring asset protection in variable site conditions and harsh industrial environments. The system serves as a robust foundation for subsequent coating applications, extending service life and reducing maintenance costs.

KEY FEATURES & BEBEFITS

- **Moisture & Cold Tolerant** – cures and adheres effectively to damp steel and green concrete, even at low temperatures (41°F).
- **Superior Corrosion Resistance** – forms a durable protective barrier, extending asset service life.
- **Versatile Compatibility** – suitable for metallic and cementitious substrates, ideal for complex site conditions.
- **Early-Stage Concrete Protection** – bonds strongly to green concrete, preventing early deterioration and preparing surfaces for long-term coating systems.

TYPICAL APPLICATIONS

CORRO-TECH GP is ideally suited for industries and environments where surface preparation and application conditions are less than ideal, yet robust long-term protection is critical.

- Cold water lines
- Structural steel
- External and internal pipework
- Sheet and bearing piles
- Process equipment
- Tank bases and external tank surfaces

APPLICATION GUIDE

Phase 1: Surface Preparation

Proper surface preparation is critical to ensure maximum adhesion and long-term performance of CORRO-TECH GP.

Metallic Substrates – Abrasive Blast Cleaning (Preferred Method)

1. Remove all oil and grease using a suitable cleaner such as MEK Cleaner.
2. Abrasive blast to SSPC-SP10 / NACE No. 2 (Near-White Metal Blast Cleaning) with a minimum blast profile of 2 mils using an angular abrasive.
3. Degrease the blast-cleaned surface using MEK or similar.
4. Coat before oxidation (gingering) occurs.

Metallic Substrates – Mechanical Abrasion

1. Remove all oil and grease with MEK.
2. Mechanically abrade using handheld grinders to SSPC-SP3 (Power Tool Cleaning).
3. Degrease the abraded surface with MEK.
4. Apply coating before oxidation occurs.

Metallic Substrates – Hydro-Blasting

1. Remove all oil and grease with MEK.
2. Hydro-blast with clean water at 12,000 psi (850 bar) to NACE 5 (SSPC SP13 WJ3-WJ1).
3. Degrease the cleaned surface with MEK.
4. Coat immediately before oxidation occurs.

Existing Concrete

1. Remove contamination by pressure washing with clean water.
2. Lightly abrasive blast or scarify, taking care not to expose aggregate.
3. Clean thoroughly, ensuring all dust and debris are removed.

⚠ Note: For salt-contaminated surfaces, pressure wash with clean water and verify salt levels are within acceptable limits before application. Refer to the Thortex Surface Preparation and Pre-Application Guide for details.

Phase 2: Product Preparation

Before mixing, ensure:

- The base component is between 60–77°F.
- The ambient and surface temperature are above 41°F.

Phase 3: Product Mixing

Full Unit (5 Ltrs)

1. Dispense both base and activator components from the container onto a clean plastic mixing surface.
2. Using the spatula provided, mix thoroughly until a uniform, streak-free material is achieved. Ensure no unmixed material remains on the spatula or mixing surface.
3. Once mixed, use the product within 2 hours at 68°F.

Phase 4: Product Application

Brush and Roller Application

1. Decant mixed material into a paint kettle or roller tray to maximise working time.
2. Using a 2 inch synthetic brush, stripe coat edges, joints, corners, and complex details at 6 mil WFT, approximately 4 inch wide.
3. Once the stripe coat is touch dry and suitable for overcoating, apply the first full coat at 6 mil WFT.
4. If required, apply a second coat at the same thickness after ~6 hours at 68°F, once the first coat has sufficiently cured.

Airless Spray Application

1. Stripe coat edges, corners, and inaccessible areas using a brush before spraying.
2. Apply using airless spray equipment capable of 135–200 bar.
3. Use spray tips between 13–21 thou.
4. Apply at a nominal 6 mil WFT.
5. Clean all equipment immediately after use with MEK or similar solvent.

⚠ Note: For small-scale applications CORRO-TECH GP may also be applied using conventional air-spray equipment. Contact Thortex Technical Department for further details.

APPLICATION AT A GLANCE

Brush & Roller Applications:

Step 1 – Equipment Check

Ensure you have:

1 x Base unit
1 x Activator unit
1 x Spatula

1 x 2-inch synthetic brush (or) 1 x medium pile roller
1 x Slow speed drill & paddle

Step 2 – Combine Components
Pour the entire contents of the activator container into the base container.

Step 3 – Mix Thoroughly
Mix using the spatula provided (or slow-speed drill & paddle), ensuring any unmixed base material around the edges is fully incorporated. Continue until streak-free.

Step 4 – Prepare for Application
Transfer the mixed material into a paint tray or paint kettle to maximise usable life.

Step 5 – Apply Coating
Apply to the prepared substrate using a brush or roller at a wet film thickness of 6 mil.

APPLICATION AT A GLANCE

Standard Airless Spray Applications:
Step 1 – Equipment Check
Ensure you have:
1 x Base unit
1 x Activator unit
1 x Spatula
1 x Brush (for stripe coating)
1 x Slow speed drill & paddle
1 x Airless spray unit (e.g., Graco)
1 x 60:1 King pump with 13–21 thou tip sizes
1 x MEK cleaner (or suitable solvent)

Step 2 – Combine Components
Pour the entire contents of the activator container into the base container. Mix thoroughly with the spatula (or drill & paddle), ensuring all material from the sides and bottom is incorporated into a uniform, streak-free blend.

Step 3 – Stripe Coat Critical Areas
Where required, use a brush to apply a stripe coat to edges, corners, welds, and areas inaccessible to spraying at a thickness of 6 mil WFT.

Step 4 – Spray Application
Feed the mixed material into a suitable single-leg airless spray unit fitted with ¼" or 3/8" hoses and a 13–21 thou tip.
Typical spray pressure: 170–200 Bar
Apply coating at 6 mil WFT

Step 5 – Equipment Cleaning
On completion, thoroughly clean all spray equipment and lines with MEK or other suitable thinner.

TECHNICAL DATA & PERFORMANCE Characteristics

Appearance

Base	Thin Film Liquid
Activator	Amber Liquid
Mixed	Grey Solvent Based Liquid

Solids Content
80%

Volume Capacity
800cc/Kg

Sag Resistance
Nil at 8 mils

Density

Base	1.32
Activator	1.03
Mixed	1.25

Mixing Ratio

Component	Base	Activator
By Weight	4	1
By Volume	3	1

Shelf Life
5 years if unopened and stored in normal dry conditions 60-86°F

Coverage Rates

5LTRS of fully mixed product will give the following cover rates
358ft² at 6mil
Please note that the coverage rates provided are theoretical and do not account for the profile or condition of the surface being repaired.

Cure Times

Useable Life

50°F	4 hours
68°F	2 hours
86°F	60 minutes
104°F	30 minutes

Minimum Overcoating Times

50°F	12 hours
68°F	6 hours
86°F	3 hours
104°F	90 minutes

Maximum Overcoating Times

50°F	72 hours
68°F	36 hours
86°F	18 hours
104°F	9 hours

Maximum Overcoating Time with CORRO-TECH GP or UNI-TECH UV

50°F	5 days
68°F	72 hours
86°F	36 hours
104°F	18 hours

Pack Sizes

This product is available in the following pack sizes:
5LTR

Mechanical Properties

Salt Fog Resistance ASTM B117	Unaffected after 5,000 hours
Humidity Resistance BS3900 Part F2	Unaffected after 5,000 hours
Hardness Shore D ASTM D2240	80
Tensile Shear Adhesion ASTM D1002 (Abrasive Blasted Mild Steel with 75-micron profile)	195kg/cm² (2,770 psi)

Heat Resistance	Suitable for use in immersed conditions at temperature up to 104°F Resistant to dry heat up to 248°F dependent on load

Chemical Resistance

The product is resistant to a wide range of inorganic acids, alkalis, salts, and organic media including:

Brine	104°F
Crude Oil	104°F
Diesel	104°F
Hydrochloric Acid 20%	104°F
Naphtha	104°F
Phosphoric Acid 30%	104°F
Sodium Hydroxide 50%	104°F
Sulphuric Acid 20%	104°F

For more detailed information, please refer to the Thortex Technical Centre for advice.

Technical Service

Complete technical assistance is available. Please contact Thortex America, INC with your requirements:
1-610-831-0222 | kclarke@thortex.com

The products that we supply are for professional use only, it is your responsibility to read the technical data sheets before you place an order and prior to application of the product

Quality

All THORTEX AMERICA, INC products are manufactured and supplied in accordance with an ISO 9001 registered Quality Management System.

Warranty

All THORTEX AMERICA, INC warrants that the performance of the supplied product will conform to the typical descriptions provided in the Technical Data Sheet.

Health & Safety

Please ensure good practices are followed at all times during the mixing and application of this product. Protective gloves and other recommended personal protective equipment must be worn. Before mixing and applying the material, please ensure you have read and fully understood all relevant information.

Legal Notice

The data provided in this Product Technical Data Sheet is for informational purposes only and is believed to be accurate at the time of issuance. However, we cannot assume responsibility for results obtained by others whose methods are beyond our control. It is the customer's responsibility to assess the suitability of the product for their intended use. THORTEX AMERICA, INC accepts no liability arising from the use of this information or the product described herein.