Xp³RB5100
Anticorrosive Coating

Xp³RB5100 is without a doubt the best rust/corrosion control coating that exists today. It was designed to provide penetration, wetting and sealing of subsurface and surfaces which are exposed to extremely severe chemical and physical environments. Advance technology cross-linked aromatic polyurethane resin based reinforced with non-leafing aluminum flake. The polymer structure is extremely adhesive and chemically inert.

CHARACTERISTICS & BENEFITS

- Self-priming to most subsurface and poorly prepared surfaces.
- Does not require a primer or base prior to application
- Provides a high degree of protection against moisture, corrosive fumes, and chemical contact
- It has excellent adhesion, flexibility, toughness, impact, and abrasion resistance properties
- Cured film conforms to United States Department of Agriculture requirements for incidental contact with food.
- Can be applied in cold damp conditions and subjected to early fog, rain, snow or condensation after application

USE:
For indoor and outdoor use. Use in problematic areas and those exposed to chemicals, such as storage tanks and reservoirs, industrial plants, bridge structures, petrochemical, water and wastewater treatment facilities. Suggested, as an all-purpose highly corrosion resistant protective coating, which also may be used as a barrier coat between conventional finishes and many specialized coatings.

COLORS: Aluminum.
FINISH: Low Gloss.
VOLUME SOLIDS: 62%.
LIMITS: Temperature resistance up to 350°F (177°C) depending upon the individual exposure. Contact Xp Lab for specific recommendations before exposure to corrosive chemicals and elevated temperatures.
DRY COVERAGE: Theoretical (no loss): 225 feet² (21 m²) per gallon based on a 6 mil (0.006) per inch coat. When computing coverage, allow for application loss and surface irregularities.
DRY FILM THICKNESS: Two coats totaling 6 mil (0.006) of an inch should be applied. A minimum of two coats should be applied making sure none of the coats are too thick.

COMPONENTS: One.

POT LIFE: 8 hours @ 70°F (after container is opened).

WEIGHT PER GALLON: 9.3 lbs.

VOC CONTENT THINNER: 2.8 lbs/gal (340 grams/lt). It conforms to United States National Volatile Organic Emission Standards.

THINNER: Dilute only as required for proper application. Do not exceed applicable volatile organic compound (VOC) regulations.

Dilutor added: 05% - 3.00 lbs/gal (360 grams/lt) 10% - 3.18 lbs/gal (381 grams/lt) 15% - 3.33 lbs/gal (400 grams/lt) 20% - 3.48 lbs/gal (418 grams/lt)

APPLICATION METHODS: Air or airless spray, roller, brush (small areas)

TEMPERATURES: Apply from below freezing to 125°F (Air and Surfaces)

RELATIVE HUMIDITY: Apply at less than 99%

CURING TIME: First coat takes 2-24 hours to dry. Once dry to the touch and within 24 hours, second coat should be applied. Additional coats can be applied once previous coat is dry, as long as it is within 72 hours. However, important to note that all times will vary depending on the relative temperature and humidity. Curing time is significantly shorter for higher temperatures or higher relative humidity and longer for lower temperatures or lower relative humidity. Curing time is affected by the method of application; the quantity of solvent used; the amount of ventilation and air circulation. Recoat will also take 4-72 hours to cure. (Refer to RECOAT AND REPAIR section if coating reaches complete cure and hardness or if subjected to extended exposure to sunlight).

NOTICE: For fast curing and low temperature applications use of XPA14 ACCELERATOR may be desired. Contact Xp Lab agents for instructions and cure time cycles.

SHELF LIFE: One year from shipment date protected between 40°F and 100°F.

DOT/FLASH POINT: Flammable Liquid Classification

PERFORMANCE DATA: Contact Xp Lab for any additional information

SURFACE PREPARATION: Surface must be dry and free of any dirt, chalk, grease, oils, salt, and loose materials before application is performed. Burrs and weld spatter
should be completely removed and sharp edges and rough welds
rounded off by scraping with a wire brush. If necessary, wash the
surface with detergents before applying **XP Rust 5100**. In this case,
made sure the surface is completely dried.

**CARBON STEEL**

Severe Exposures: SSPC-SP-6 (Commercial Blast Cleaning). Mild
Exposures: SSPC-SP-3 (Power Tool Cleaning) or SSPC-SP-2 (Hand
Tool Cleaning). Metal surfaces should have an anchor profile of one mil
(.001) or more.

**WELDING:**

Welding should precede coating. If already coated, follow instructions
in U.S.A. Standard Z49.1 Safety in Welding and Cutting.

**EXISTING COATINGS:**

Surface should be clean and free of any ice, water droplets or puddles,
dirt, chalk, grease, oils, salts, and deleterious materials before application
is performed. Perform a test to check adhesion compatibility. If
necessary abrade the surface sufficiently to provide a profile adequate to
ensure a mechanical bond.

**PRE-APPLICATION:**

All application equipment should be cleaned and flushed with Xylene
or Methyl Ethyl Ketone (MEK) (DO NOT USE THINNER), and dried
as **XP Rust 5100** will be affected by water contamination. Do not
allow mixed material to stand in equipment after use.

**MIXING:**

**XP Rust 5100** should be shaken or stirred thoroughly for 2 minutes or
until completely uniform. Continue stirring during application. If
product has been sitting for six or more months, it may develop
settling. Follow the same process as above but increase the stir time and
be sure to break up clumps on bottom, if any. Do not dilute or mix **XP
Rust 5100** with any other product.

**APPLY:**

Apply **XP Rust 5100** with a sprayer, roller, or brush. A minimum of
two even coats totaling 6 mil (0.006) of an inch should be applied
making sure none of the coats are too thick, also taking into account
variations in design configurations, application equipment, temperature
and other factors. The second coat of **XP Rust 5100** must be applied to
completely seal the first coat. Ensure seams and irregularities are
completely covered.

**Application below minimum or above maximum suggested dry film
thickness ranges might adversely affect performance.**

**RECOAT AND REPAIR:**

If material has reached complete cure and hardness, or if subjected to
extended exposure to sunlight, uniformly abrade the surface and feather
the edges. The surface must be roughened sufficiently to provide a
profile adequate enough to ensure a mechanical bond between the
previous coat and new coat.

**INSPECTION:**

Check for desired dry film thickness and for pinholes, holidays, bare
areas, etc. before placing in operating service.
AIRLESS SPRAY: Graco or equal. Pump ratio 30:1 or higher, 206-7 18 gun with fluid tip of \(0.021''\) or larger orifice size with Reverse-A-Clean tip, 3/8” I.D. or larger high pressure solvent resistant fluid line, \(\frac{3}{8}''\) I.D. or larger air supply line. Continuous air source capable of 80 to 100 psi inbound pressure at pump.

CONVENTIONAL SPRAY: Binks or equal. Pressure material pot with mechanical agitator, dual regulators, air-gages, and oil and moisture separators. No. 18 gun (external mix), 67 fluid nozzles, 65 fluid needle, 67 PB air cap, heavy-duty fluid spring, Teflon fluid packing, \(\frac{1}{2}''\) I.D. or larger high solvent resistant fluid line and 3/8” I.D. or larger air-supply line. Continuous air source capable of 20 cfm or more at 80 psi per nozzle and 60 psi to the pot.

GENERAL: Regulate pressure as required for proper application. Proportionally adjust pressure higher for smaller hose diameter and/or longer hose length and adjust pressure lower for larger hose diameter and/or shorter hose length. Select tip angles and orifice diameters according to application needs.

BRUSH: Short hair or natural bristle.

ROLLER: Carpet-type roller covers.

CLOTHING: Wear protective garments, shoes, goggles, and filter masks. Use protective barrier creams on exposed skin areas.

CONFINED SPACES: Use explosion-proof lighting and electrical equipment, non-sparking tools, clothes, and shoes. Ground all structures and equipment. Use procedures that prevent static electrical sparks. Wear properly fitted appropriate NIOSH/MSHA approved fresh air respirator such as MSA or equal with 1/4” I.D. or larger air supply line connected directly to proper air source during and after application unless air monitoring demonstrates vapor/mist levels are within safe limits. Use suction type exhaust fans and blowers with sufficient cfm capacity to keep solvent vapors below 20% of the explosive limit. CAUTION! Air circulation and exhausting of solvent vapors must be continued until the coatings have fully cured to insure that no potential for fire, explosion or health hazard remains.