

Protective Coatings

Apexior® Number 3C VOC Compliant Single Component Air Cure Coating Immersion in Fresh/Salt Water

Description

Apexior Number 3C is a VOC compliant, single component, easy to apply air cure coating specifically formulated for the waterside corrosion prevention of metal surfaces. It has outstanding wetting properties and adheres well to power tooled cleaned areas. Apexior Number 3C is resistant to continuous immersion in fresh or salt water as well as frequently wet or high humidity environments. Apexior Number 3C prevents pitting corrosion and stops corrosion which has already begun - except for badly pitted areas. It aids in the reduction and prevention of tight bonding of hard scale and allows for easy cleaning and removal of scale buildup. Apexior Number 3C performs ideally with water treatment.

Recommended Uses

Apexior Number 3C protects the water-side surfaces of:

- Chillers
- Cold water storage tanks
- Condenser heads and shells
- Inside shell of AC units
- Pump casings on fresh/salt water intakes
- Inner housings of pumps
- Sump pump pits and chain lockers
- · Bilge and forepeak tanks
- Ballast and brine tanks

Features

- VOC Compliant 2.8 lb/gal (335.5 g/L)
- Air dries, easy to apply
- Excellent wettability properties
- Resistant to fresh/salt water
- Easily re-coatable
- Surface tolerant features
- Inert to water treatment
- Prevents scale buildup

Not Recommended For

- Immersion in solvents or acids
- Water immersion service above 140°F (60°C)
- Potable water storage tanks

Surface Preparation - Carbon Steel

- To ensure optimum long-term coating system performance, surfaces must be clean, dry and free from dirt, oil, grease, salts, welding flux, mill scale, rust, oxides, old paint, corrosion products or other foreign matter.
- Remove all surface imperfections that will induce premature coating system failure. Chip or scrape off weld splatter. Grind down sharp and rough edges, gouges, and pits.
- 3. Abrasive blast surface per specification SSPC-SP 10, "Near-White Blast Cleaning", or per NACE Standard No. 2 to a profile depth of 1.5 - 2.0 mils. Abrasive used in blasting should be selected carefully from materials of mesh size required to produce the desired anchor pattern.
- 4. If abrasive blasting is not permitted, prepare surface by power tool cleaning per SSPC-SP 11. Use 3M brand "Heavy Duty Roto Peen", type C flap wheel cleaning system mounted on an air-driven motor. This method will provide a surface equivalent to that provided by commercial blast cleaning per SSPC-SP 6, including the desired surface profile.

Mixing

Redisperse any settled-out pigments by stirring with a paint paddle followed by thorough mixing to a uniform consistency with an explosion-proof or air-driven power mixer. Do not open containers until ready to use. Keep lid on container when not in use.

Application Guidelines - Carbon Steel

Surface temperature must be at least 5°F (3°C) above dew point.

dew point.	
Primer: Apexior Number 3C	3.5-4.0 mils
	(87-100 microns)
Topcoat: Apexior Number 3C	3.5-4.0 mils
•	(87-100 microns)
Total dry film thickness	7.0-8.0 mils

(175-200 microns)

Bulletin Apexior Number 3C

Application Equipment

Apexior Number 3C may be applied by airless spray or brush. Do not apply Apexior Number 3C in heavier films than specified since blistering may occur. During application of Apexior Number 3C ventilate area with high volume of air.

Airless Spray:

Spray gun Graco 205-591, 208-663
Fluid tips* 163-610, 163-315
Pump Graco Bulldog 30:1
Fluid hose 3/8" to 1/2" ID
Air pressure to pump
Pump operating press. 80-90 psi

* Use Reverse-A-Clean® tips for fast, easy clean out.

Brush:

Do not use synthetic bristle brushes. Using the side of the brush, scoop Apexior Number 3C from the container and apply in sweeping strokes, overlapping the brush strokes. Do not attempt to remove brush marks.

Thinning

Only thin Apexior Number 3C with Dampney 180 Thinner. Note: Use of other thinners not approved by Dampney may hinder product performance and void product warranty.

Dry Time 70°F (21°C) 50% RH

Apexior Number 3C will air dry in 16-24 hours. Allow equipment to air dry for 7 days before placing equipment into service. Ventilate the area with a high volume of air until there is little or no odor of solvent remaining. Coating must be free of solvents prior to being placed into service. Begin ventilation of area during application of Apexior Number 3C.

Cleanup

Thoroughly flush spray equipment and hoses immediately after use with Dampney 100 Thinner. Dismantle spray equipment and clean parts, brushes and rollers with Dampney 100 Thinner.

Storage

Store in a cool, dry place with temperature between 50°F and 100°F (10°C and 38°C). Keep container closed when not in use.

Precautionary Information

WARNING: Flammable Liquid and Vapor

Keep away from heat, sparks and flame. Vapors may cause flash fire. Do not breathe vapors or spray mist. Avoid contact with eyes, skin and clothing. Use with adequate ventilation during mixing and application. Wear an appropriate, properly fitted organic vapor cartridge-type respirator (NIOSH approved) during and after application unless air monitoring demonstrates vapor/mist levels are below applicable limits. Follow respirator manufacturer's directions for respirator use. Wash thoroughly after handling. Wear protective gloves, chemical safety goggles and impervious protective clothing. Use skin cream. In confined spaces it is required to use a positive pressure supplied-air respirator (NIOSH approved). explosion-proof lights and electrical equipment. Use nonsparking tools and equipment. Wear conductive and nonsparking footwear. Make certain all electrical equipment is grounded. Observe all safety precautions and follow procedures described in OSHA regulations. See Material Safety Data Sheet (MSDS) for complete precautionary and disposal information.

If instructions and warnings cannot be strictly followed, do not use this product.

KEEP OUT OF THE REACH OF CHILDREN

FOR INDUSTRIAL USE ONLY

WARRANTY

Dampney protective coating products are expressly warranted to meet applicable technical and quality specifications. The technical data contained herein are accurate at the date of issuance but are subject to change without prior notification. No warranty of current accuracy is hereby given or implied. User must contact Dampney to verify correctness before ordering. Dampney assumes no responsibility for coverage, performance or injuries resulting from handling or use and LIABILITY, IF ANY, SHALL BE LIMITED TO PRODUCT REPLACEMENT. In no event will Dampney be responsible for consequential damages, except insofar as mandated by law. Dampney DISCLAIMS ALL OTHER WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Bulletin Apexior Number 3C

TECHNICAL DATA

Characteristics	Apexior Number 3C
Generic Type	Organic
Color	Black
Temperature resistance (wet only)	
Continuous	Ambient - 140°F (60°C)
Percent (%) Solids by volume	50
Dry film thickness per coat	3.5 - 4.0 mils (87 - 100 microns)
Wet film thickness per coat	7.0 - 8.0 mils (175 – 200 microns)
Theoretical coverage	800 mil. sq. ft. per gallon
	19.6 sq. m. @ 25 microns per liter
Application temp. @ 50% RH	50°F-120°F (10°C-50°C)
Drying time @ 50% RH	70°F (21°C)
To touch	16-24 hours
To recoat	16-24 hours
Full cure @ 70°F (21°C)	7 days
Weight per gallon	
Apexior Number 3C	8.2 lb (3.7 kg)
Dampney 180 Thinner	7.5 lb (3.4 kg)
Flash point	110°F (43°C)
Pot life	N/A
Shelf life	1 year
Volatile organic compounds	2.8 lb./gal. (335.5 g./l.)