



TAB 18 C
IMA – 407
ZINCILATE
810 C

ZINCILATE 810C air-dries to a pleasing aluminum finish. As it is intended for one-coat applications, it is frequently used without an overcoating, in which form, at equal film thickness, it provides protection superior to galvanize. It may also be used as a primer when a decorative coating is desired.

Zincilate 810C, used alone in a 2-mil thickness, will cover approximately 325 sq ft. per gallon. Used as a primer, coverage is even greater, ranging up to 500 sq. ft. per gallon. Either use offers outstanding savings over the multi-coat system, as only one decorative coating is ever needed.

Zincilate 810-C is designed to provide maximum protection under humid conditions and is recommended for applications where Zincilate-coated parts are subject to water immersion. This particular Zincilate formulation can be used extensively on water tanks, fire fighting equipment and airport crash trucks.

Zincilate 810-C is weldable, because it retains its conductivity. Welding over Zincilate coated materials can be done at any time after application. The formulation contains no chemicals to contaminate electrodes, hence there is no time lost in cleaning or replacing electrodes.

Zincilate 810-C offers exclusive advantages over hot dip galvanizing by completely eliminating warpage. Because the molten zinc bath causes warpage and even some shrinkage of the metal, it is impractical to drill, pre-fit or otherwise process the metal before galvanizing. When this work is done after galvanizing, exposure of the bare metal by drilling, etc., destroys the complete protection galvanizing should afford.

ZINCILATE 810-C - Characteristics and Properties

- ADHESION - Excellent
- GALVANIC PROTECTION - Superior to Galvanize
- WEIGHT PER GALLON – 18.9 lbs minimum
- SURFACE PREPARATION REQUIRED - Blasting recommended for severe applications such as immersion
- APPLICATION METHODS - Spray, Dip, Flow-Coat or Brush
- DRYING TIME - Baking not required; heat up to 450°F may be applied to expedite drying.
- Dries "to touch" - 30 minutes
- Dries "to handle" - 4 hours
- Complete hard dry - 24 hours

Resistance of finished 810-C coating to:

CORROSION	Superior to Galvanize
ACIDS	Superior to Galvanize
ABRASION	Excellent
IMPACT	Excellent, even at temperatures as low as -65° F
CHEMICALS, EXCEPT ACIDS	Good
OILS AND GREASES	Excellent
SALT WATER	Excellent
FRESH COLD WATER	Excellent
FRESH HOT WATER	To 150° F
CONTINUOUS IMMERSION	Good
DRY TEMPERATURES	-65° F to +450°F
ELECTRICAL CURRENT	Less than 10 ohms per inch (per Spec. MIL-P-26915)
ZINCILATE	Self-Protecting, Anti-Corrosion Coatings

What's so different about Zincilate?

The oldest and perhaps best known method of providing true galvanic protection to iron, steel and aluminum is hot dip galvanizing, familiar to everyone as the method used on such familiar objects as metal rubbish containers.

If you are acquainted with the HOT DIP method, you know that the quality of the galvanize is governed by the quality of adhesion at TWO points:
 1.) Between the pure zinc and the alloy formed by the zinc and the metal. 2.) Between this alloy and the metal itself.

Any failure, or even weakness, at EITHER of these TWO points can destroy the effectiveness of the galvanize-and the protection it affords.

Zincilating-modernized galvanizing-completely eliminates one point of adhesion, automatically reducing any possibility of weakness by a full 50%.

This is due to the fact that in Zincilating, the pure zinc adheres directly to the metal; no alloy is ever formed. The fine particles of zinc "floating" in Zincilate insure a better adhesion at the only point necessary because there is a better electrical attraction between the zinc and the metal.

APPLICATION DATA:

Surface preparation: For severe exposures commercial sandblast in accordance with SSPC-6-63 is recommended: however, power tool clean or hand clean to bare metal will give good results for many applications:

Method of application: Spray, brush, dip or flowcoat

Guns	Fluid Tip	Air Cap
Binks #18 or #62	66	66 PE
DeVilbiss P-MBC or JGA	E	704

Number of coats: 1 or 2

Drying time: Dry to touch: 30 minutes Dry to handle: 4 hours Dry hard thru: 24 hours

Thinner used: Add up to 1 quart Xylene per gallon of Zincilate 810-C for spray, dip or flowcoat. Do not reduce for brushing.

SELECTION DATA:

Generic type: Epoxy ester

General properties: Zincilate 810-C is an air dry primer that provides protection to steel superior to galvanize. Due to its sacrificial action, scratches and chips do not rust as quickly and rust creepage is stopped. Because it retains its conductivity when dry, Zincilate 810-C is weldable. Zincilate meets the requirements of MIL-P-26915A. Type I. Class A.

Recommended uses: Zincilate 810-C is designed to provide maximum protection under humid conditions, and is recommended for applications where parts are subject to water immersion. It has been used extensively on water tanks, fire-fighting equipment and airport crash tanks.

Not recommended for: Acid exposures.

Chemical resistance guide:

Exposure	Immersion	Splash & Spillage	Fumes
Acids	Not Recommended	Not Recommended	Not Recommended
Alkalies	Not Recommended	Fair	Good
Solvents	Fair	Good	Excellent
Salts	Excellent	Excellent	Excellent
Water	Excellent	Excellent	Excellent

Temperature resistances:

Continuous 350°F
Non-continuous 450°F

Retains flexibility and protective properties as per MIL-P26915A

Flexibility: Passes 1/4" mandrel bend Weathering: Excellent

Abrasion resistance: Good

Electrical resistance: Not over 10 ohms for a thickness of one inch as per MIL-P-26915A.

Substrates: Steel, iron or aluminum.

Compatibility with other coatings: Some catalyzed epoxies are not compatible, Check before using.

SPECIFICATION DATA: Solids content: By weight: 79 ± 1% By volume: 42 ± 1% Zinc Dust: 80% on solids

Film thickness per coat: 2 mils dry

Theoretical yield: 656 mil ft./gal.

Theoretical coverage* per gallon: 328 sq. ft. at 2 mils dry

Color: Zinc gray

Flash point: (Closed Cup) 80°F

Wt./gal. 18.9

*NOTE: Material losses during mixing and application must be taken into consideration when estimating job requirements.

