

## AP-ZINC

(AZ 76, American Coatings)

## INORGANIC ZINC

Inorganic zinc primer for heavy-duty protective paint systems.

### GENERAL FEATURES

- SELF CURING SOLVENT BASED INORGANIC ZINC THAT CURES RAPIDLY UNDER LOW TEMPERATURE, HIGH HUMIDITY CONDITIONS.
- SERVICE TEMPERATURES UP TO 400°C
- SUPERIOR ABRASION RESISTANCE
- EXCELLENT RESISTANCE TO SALT SPRAY
- EXCELLENT TANK LINING MATERIAL FOR FUELS AND ORGANIC SOLVENTS

### DESCRIPTION

An inorganic, permanent type primer that protects steel galvanically. AP-ZINC has good application properties and prevents undercutting type corrosion. AP-ZINC is especially suitable for cool humid environments (as low as -12°C and 95% humidity). At humidities less than 50% and temperatures below 21°C allow additional curing time before topcoating.

### USES

#### General Industrial and Marine:

AP-ZINC is a single coat 75 - 150µ coating used to protect steel surfaces subject to severe weathering and abrasion. More thickness may be required to coat old roughly pitted steel surfaces. AP-ZINC is an excellent tank lining material for fuels and organic solvents. If topcoating is required for appearance, or a permanent primer system is desired, AP-ZINC can be overcoated with phenolics, epoxies, polyurethanes, chlorinated rubber, or other heavy duty topcoats. Some topcoats may require a tie coat. If exposed to alkaline, acidic fumes, or spillage, AP-ZINC must be topcoated. When topcoating with recommended organic coatings, a thin mist coat, followed by a full application coat applied in a cross hatch method, may be required.

**NOT RECOMMENDED FOR** – Contact with acids, alkalis, or salts having a PH range greater than 10 or less than 5 without a suitable topcoat. Not recommended for H<sub>2</sub>S environments

<sup>1</sup> Based on ASRM Method 2697

<sup>2</sup> Coverage's are theoretical and do not make provision for spray losses

### PHYSICAL DATA

Finish ----- Flat  
Color ----- Green  
Applied Over ----- Steel  
Components ----- Two  
Cure ----- Solvent Release and Reaction  
With Atmospheric Moisture

Volume Solids <sup>1</sup> ± 2% ----- 68%

#### Recommended Dry Film

Thickness ----- 75 - 150µ  
Number of Coats ----- One  
Application Method----- Conventional or Airless Spray  
Thinning Required----- 10 – 15% Thinner #290

Dry Time @ 25°C and 50% RH:

Touch ----- 15 – 30 minutes  
Through ----- 8 – 12 hours  
Topcoat ----- 12 – 16 hours

Theoretical Coverage at:

Recommended Thickness <sup>2</sup> ----- 40 – 17 m<sup>2</sup>/gal.

#### Temperature Limit

Immerse----- Consult your AVF Paint Representative  
Atmospheric ----- 400°C

#### Miscellaneous Properties % Zinc in the Dried Film

By Weight ----- 76  
Shelf Life ----- 6 months  
Pot Life – Mixed @ 25 °C----- 12 hours (less at higher temperatures)

Mix Ratio – by Weight ----- 1 parts A to 1.6 parts B

### PERFORMANCE DATA

TEST	RESULTS
PENCIL HARDNESS ASTM D-3363	HB TO H
ADHESION ASTM D-3359	No separation of the paint film or delamination of any square.
ADHESION ASTM D-4541	600 psi
SALT FOG RESISTANCE ASTM B-117	Passes 1000 hours with no blistering or rusting. No undercutting from the scribe.
WEIGHT PER GALLON ASTM D-1200	7.5 ± 0.1 Kg/gal
WEIGHT SOLIDS % ASTM D-2369	70.6%
OIL IMMERSION ASTM D-1308	Passes 1000 hours
SALT WATER IMMERSION ASTM D-1308	Passes 1000 hours
SLIP COEFFICIENT ASTM A-328	Meets requirements for Class B rating.

**SURFACE PREPARATION**

**Immersion and/or Severe Service:**

White Metal Sandblast (SSPC-SP5-63) (Sa3)

**Non-immersion or Moderate Service:**

Near White Metal Sandblast (SSPC-SP10-63) (Sa2 ½)

**Non-immersion or Light Industrial Service:**

Commercial Metal Sandblast (SSPC-SP6-63) (Sa2)  
Maximum product performance will be achieved by abrasive blasting with 16 – 40 mesh silica sand, G-50 steel grit, or an equivalent material to obtain a 38µ jagged anchor profile. Remove all oil or grease from surfaces to be coated with clean rags soaked with Toluol.

**APPLICATION INFORMATION**

**APPLICATION METHOD**

Apply AP-ZINC by conventional or airless spray. AP-ZINC should be applied in a single pass wet film with 50% overlap. Parallel right angle passes should be made holding the gun approximately 10 – 12 inches from the metal surface.

**MIXING**

Mix the vehicle portion then combine and mix as follows. Add AP-ZINC POWDER to AP ZINC LIQUID while mixing with mechanical agitation. **DO NOT MIX IN REVERSE.** Mix until free of lumps, then pour mixture through a 30-mesh screen.

**CLEAN-UP AND THINNING**

Clean all equipment with Thinner #290 immediately after use. Thin up to 15% by volume with Thinner #290 if required.

**SPRAY EQUIPMENT**

**FOR AIRLESS SPRAY**

Use a 3/8" I. D. Material Hose  
Suppliers ----- Graco, Speed Flo, De Vilbiss  
Fluid Pump ----- 30:1  
Fluid Orifice, Inches ----- 0.025 – 0.031  
Approx. Fluid Pressure, psi ----- 1,500 – 2,000

**FOR CONVENTIONAL SPRAY**

Supplier	Fluid Tip	Fluid Needle	Air Cap
De Vilbiss	AV-601-E	MBC-444-E	AV-1239-2 AV-40-24
Binks # 18 Or # 19	66	65	66PA
Air to Gun -----			60 – 70 psi
Air to Pot -----			10 – 12 psi

Pot should be equipped with a mechanical agitator.

**SAFETY INFORMATION**

**WARNING! FLAMMABLE**

AP ZINC is a flammable liquid and may cause eye and skin irritation. Keep away from heat, sparks, and open flame. Keep container closed. Use only in well ventilated areas. Avoid continued breathing of vapors. Do not take internally. In case of contact, flush with copious amounts of water for at least 15 minutes and get medical attention.

<u>SHIPPING DATA</u>	<u>Part A</u>	<u>Part B</u>
<b>Proper Shipping Name</b>	Paint Liquid	Zinc Dust
<b>Hazard Class</b>	Flammable	N/A
<b>Flash Pt. °C SETA</b>	16°C	N/A
<b>Shipping Wt(Kg)</b>	<b>5 gallon</b>	<b>3 gallon</b>
	18.8	21
<b>UN No.</b>	1263	1436

**PACKAGING**

**5 Gallon Units**

Part A Vehicle ----- 5 gallon can partially full  
Part B Dust ----- 3 gallon can of powder

**MATERIAL SAFETY**

Safety Data Sheet of the product is available on request.

For more information please contact:

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