# **Product Data Sheet**

No. 17007VG - 03/13

# LOW VOC COLD GALVANIZE COATING 93% ZINC RICH BULK VOC: <100 g/L

PRODUCT NUMBER: 7007VG

#### I. GENERAL DESCRIPTION

**Description:** Low VOC Cold Galvanize 93% Zinc Rich is an exceptionally smooth-flowing, high-solids compound that provides a fast drying coating that protects ferrous metals in highly corrosive environments. Stops rust and corrosion on any steel or iron surface. This one compound, bulk formula uses metallic zinc dust that is 97% pure. The dry film contains 93% zinc which fuses to metal substrates for protection equal to or better than hot-dipped galvanizing.

Benefits: The coating dries to a tough, permanent, hard coat. If the surface is scratched or broken, an electrochemical reaction (sacrificial anodization) causes the zinc to sacrifice itself for the base metal's protection. Even if moisture is present, the zinc coating will corrode, but it will continue to protect the metal to which it is applied. It protects surfaces subjected to the harshest corrosive environments, resisting salt, moisture, and heat. It acts as both a metallic primer and single coat for iron, steel, and their welds. 7007VG can be the final protective coating or it may be top coated with Aervoe's DTM water-based Rust Proofing paint. An excellent choice for preventive maintenance to reduce or eliminate equipment downtime for repair due to corrosion damage and withstands up to 2,000 hours salt spray exposure. Meets multiple performance requirements of ASTM, MIL, and DOD specifications (see "Specifications"). Acceptable as a coating in federally inspected meat and poultry plants for application to structural surfaces or surfaces where there is a possibility of incidental food contact. Offers the convenience of on-the-job application when hot dipping is not available.

**Application:** Use on damaged galvanized surfaces, structural steel, automobiles, guard rails, bridges, TV and radio towers, welded joints, storage tanks, signs and sign posts, equipment (farming, mining and construction, power plant, railroad, offshore, etc), gutters, pipelines, transformers, and corrugated metal buildings.

Directions: Apply directly to metal or galvanized surfaces that are free of loose rust, heavy mill scale, old paint, grease, moisture, and other contaminants. Clean severely rusted areas with a wire brush to remove loose scale. For best results, use at temperatures between 64° and 86°F (18° to 30°C). Drying may be accelerated by applying heat. Notice: Zinc is a dense material which will settle on the bottom of the container. This product is formulated to resist hard settling (where zinc is dry, clumped together and will not remix). However, soft settling (the zinc sinks to the bottom but remains wet, no clumping, and will remix) is natural for this product and can occur from road vibration during transportation or while sitting on the shelf. Bulk application: mix contents thoroughly (paint shaker or electric drill with metal paint stirrer) and scrape bottom and sides. Contents may be applied full-strength without thinning. If using in conventional spray equipment, use a minimum pressure of 40 psi. If thinning, do not add thinner directly to the contents; pour contents into separate container and thin as necessary with acetone or another VOC EXEMPT solvent. Invert stored bulk containers occasionally to keep solids in suspension.

**Limitations:** Please refer to the Safety Data Sheet for specific information on material hazards, etc. Do not apply at temperatures below 40°F (4°C), or if rain is imminent within 6 hours of application. Galvanizing products have a limited shelf life; use them within 12 months from the date of manufacture (guarantee is for 6 months from date of purchase and 12 months from date of manufacture). This product has special conditions related to storage. In bulk form, the user must be aware of possible gas formation which could distort the container and affect storage stability. Containers should be stored in a cool dry place.

Packaging:

Bulk: 1 case of 1 gallon 20 lbs. (9.07 kg) 0.31 CF (0.009 CM)









## II. CHARACTERISTICS & PROPERTIES (7007VG Low VOC Cold Galvanize Coating 93% Zinc Rich)

Specifications: Meets specification MIL-P-21035B (par. 3.3.1, 3.3.2, & 3.3.3) and performance requirements of MIL-P-46105(MR) (par. 3.2, 3.3.1, 3.5.8. 4.4.5) and DOD-P-21035A (par. 3.1, 3.2, 3.5.3, 3.5.6, 4.4.3, 6.1, & 6.5). Meets ASTM B-117 salt spray (2000 hrs) and ASTM A 780. USDA accepted Category 21. This product meets South Coast Air Quality Management District (SCAQMD) VOC emission standards of 100 g/l.

Gloss at 60°	< 5
Class	Metallic
Coverage:	
Theoretical (at 1 mil dry)	500 sq. ft.
Practical (at 1/2 mil dry)	1000 sq. ft.
Drying Schedule (at 77° F [25° C], 50% Humidity at 1 mil dry):	
To touch	20 min.
To handle	1 hr.
To recoat	Before 2 hrs. or after 72 hrs.
Full cure	72 hrs
Performance and Chemical Properties:	
Weight per gallon	20.5 lbs
Specific gravity	
Viscosity	70 KV
Flammability: Label marking	Flammable
Flash point	50°F (10°C)
Operating temperature range	60° to 80°F (16° to 27°C)
Percent solids by weight	67%
Percent solids by volume	31%
Percent pigment by volume	26%
SCAQMD VOC (Zinc Rich Primer)	<100 g/L
Interior durability	Excellent
Exterior durability	Excellent
Temperature resistance	150°F (65°C)
Color fastness	Excellent
Adhesion (ASTM D3359)	Excellent
Salt spray corrosion (ASTM B117)	
Mineral Spirits resistance	· · ·
Gasoline resistance	Good
Motor Oil resistance	Good
Pencil hardness (ASTM D3363)	<2B
Food contact rating	
Base Materials:	
Resin system	Epoxy Ester
Solvents (top two)	
III. SHIPPING, STORAGE AND HEALTH	
UN numberUN	1263
Proper Shipping Description	
Hazard Class3	
	ntainer Size Determines Applicability
· ·	· ·
Packing Group II Limited Quantity Cor Warehouse storage level number Flat Storage temperature 32° Shelf life 1 ye	mmable liquid class 1-B to 120°F (0° to 49°C)

#### IV. MISCELLANEOUS

HMIS ratings

Appearance:

Contains no Ozone Depleting Substances (O.D.S.)

 Health
 2

 Fire
 3

 Reactivity
 1

## V. WARRANTY

1-year performance warranty on all products from date of purchase. Report to home office or local Aervoe representative for examination. Because Seller cannot control Buyer's handling or use of product, Seller makes no warranty expressed or implied when not used or stored in accordance with directions. Seller shall not be liable for cost of labor, incidental or consequential damages, and this warranty is limited to replacement of product or credit of purchase.

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