

Product Data Sheet

No. 13000DTM - 08/11

DIRECT TO METAL (DTM)

WATER-BASED RUST PROOFING PAINT - BULK (<100 G/L)

PRODUCT NUMBERS:

3010 - SAFETY RED*	3040 - SAFETY GREEN*	3070 - SAFETY WHITE*
2030 - SAFETY YELLOW*	3050 - SAFETY ORANGE*	3120 - FLAT BLACK
3030 - SAFETY BLUE*	3060 - SAFETY BLACK	3130 - FLAT WHITE
		3490 - METER GRAY (ANSI-49)

Product number plus letter designation is as follows:

G = 2 one-gallon cans per case; F = 1 five-gallon pail; D = 55-gallon drum

* OSHA Safety Colors

I. GENERAL DESCRIPTION

Description: Aervoe Direct To Metal Water-Based Rust Proofing Paint is a high quality industrial maintenance enamel coating formulated for mild to moderate interior/exterior industrial exposures. This product offers lasting protection against corrosion, light abrasion, weathering and mild chemical fumes. Direct To Metal signifies that the product does not require a primer coat. In harsher environments, 2 coats of DTM may be applied for maximum protection.

Benefits: This high quality industrial coating is VOC compliant and will provide good resistance to moderate environments including rain, fog, moisture. Excellent temperature resistance to 200°F. Excellent gloss appearance, high-hide coverage that provides corrosion protection especially on metal surfaces. A primer is not required and DTM can be applied over sound rusted areas; however, loose flakes, dirt, grease, oils, other surface contaminants or particles should be removed first with a wire brush and chemical cleaning.

Applications: Ideal for equipment maintenance in food plants, restaurants, schools and hospitals as well as O.E.M. production. Exceeds many performance standards of nationally recognized brands. Use on galvanized or ungalvanized metal, wood and other common surfaces including concrete (masonry) and

nonporous plaster. Excellent for use on motors, tools, cabinets, pipelines, drums, conduit, ducts, furniture, steel bars, railings, tool boxes, electrical equipment and safety color coding.

Directions: For best results, surface must be clean, dry and free of grease, rust, scale and any other loose particles that could affect film adhesion. A good acrylic block filler is usually needed for masonry. Concrete should be washed with commercial detergent before application. Stir thoroughly and apply by brush, roller or spray. Thinning: Generally not required for brush or roller application. For spraying equipment, thin up to 12% with water (refer to the Surface Preparation, Application and Equipment Recommendation Sheet for more information).

Limitations: Please refer to the Material Safety Data Sheet for specific information on material hazards, etc. Please check your local air quality standards before using any bulk paint. Check all plastic surfaces for adhesion and compatibility before use. Not recommended for water immersion services. **PROTECT FROM FREEZING.**

Packaging:

Liquid Bulk:	Case: 2 gallon cans (mt. rd.)	23 lbs. (10.4 kg)	0.50 CF (0.014 CM)
	5-gallon pail (mt. rd.):	52 lbs. (23.6 kg)	1.20 CF (0.034 CM)
	55-gallon drum (mt. rd.)	535 lbs. (242.7 kg)	8.50 CF (0.241 CM)

II. CHARACTERISTICS & PROPERTIES (Average for all colors)

Specifications:

Meets the following Regional Air Quality Boards, Industrial Maintenance Coatings requirements for VOC emissions:
SCAQD, CARB, OTC, LADCO, and MPRO.

Appearance:

Gloss at 60° Flat <5 / Gloss >80
Class Flat, Gloss

Coverage:

Theoretical (at 1 mil dry) 648 sq. ft./gal
Practical (at 2 mil dry) 324 sq. ft./gal

Dry Schedule: (at 77° F [25° C], 50% Humidity at 1 mil, dry)

To touch 30 min.
To handle 2 to 4 hours
Full cure 72 hours
To recoat Anytime

Performance and Chemical Properties:

Weight per gallon 9.3 lbs (average)
Specific gravity 1.1
Viscosity 80-90 KU
Flammability: Label marking Not Regulated
Flash point > 211° F (99°C)
Operating temperature range 50° to 80° F (10° to 27° C)
Percent solids by weight See attached
Percent solids by volume See attached
Percent pigment by volume 5-7% (average)
Volatile Organic Compound level < 100 g/L
Interior durability Excellent
Exterior durability Excellent
Temperature resistance Excellent to 200°F
Color fastness Very Good
Adhesion Excellent
Salt spray corrosion > 300 hrs direct to metal
Mineral spirits resistance Good
Gasoline resistance Poor
Motor oil resistance Good
Pencil hardness F

Base Materials

Resin system Styrene Acrylic Latex
Solvents (top two) Glycol Ether DPNB

III. SHIPPING, STORAGE AND HEALTH

IMDG number N/A
D.O.T. container spec N/A
D.O.T. shipping description Not Regulated
Warehouse storage level number N/A
Hazardous class (CFR-49) Not Regulated
Storage temperature 40° to 120°F (4° to 49°C)
Shelf life 3 years
HMIS ratings
Health 1
Fire 1
Reactivity 0

IV. MISCELLANEOUS

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

V. WARRANTY

The statements made herein, on labels, product bulletins or by any of our employees or agents concerning this material are given for information only. Any liability whatsoever of Aervoe Industries, Inc. to the user of the product, is limited to replacement of the product or purchase price refunded.

DIRECT TO METAL (DTM) WATER-BASED RUST PROOFING PAINT

PRODUCTS	% SOLIDS BY WEIGHT	% SOLIDS BY VOLUME	COATING VOCs
3010 Safety Red.	44	.40	73 g/l
3020 Safety Yellow.	43	.39	81 g/l
3030 Safety Blue	41	.37	81 g/l
3040 Safety Green	39	.36	83 g/l
3050 Safety Orange	42	.38	80 g/l
3060 Safety Black.	42	.40	82 g/l
3070 Safety White	48	.38	93 g/l
3120 Flat Black.	51	.46	71 g/l
3130 Flat White	58	.51	60 g/l
3490 Meter Gray.	43	.39	82 g/l

SURFACE PREPARATION, APPLICATION AND EQUIPMENT RECOMMENDATION SHEET

13000_{DTM} DIRECT TO METAL (DTM) WATER-BASED RUST PROOFING PAINT (VOC < 100 g/L) - 08/11

SURFACE PREPARATION

BARE METAL	Remove all dust, dirt, grease, or chemical contaminants by washing surface with Aervoe #399, 400, or 5070 Cleaner/Degreaser, or other suitable cleaner. Allow to dry before application.
STEEL / GALVANIZED METAL	Remove loose rust, mill scale, or the remainder of previous coatings by Hand Tool (SSPC-SP-2) or Power Tool (SSPC-SP-3) cleaning. Wire brushing is most effective in removing oxidation from galvanized metal. For more severe environments prepare surface by Commercial Grade (SSPC-SP-6) Blast Cleaning. A 1-2 mil surface profile should be achieved.
CONCRETE / MASONRY	Scrape and wire brush or power tool clean to remove loose concrete, masonry or previous coatings and to remove any white powder from the surface. Allow new substrates to cure for 30-days before coating. Very dense, non-porous, or chemically treated concrete may require abrasive blasting or sanding to ensure proper coating adhesion. Surfaces with mold or mildew should be cleaned with an alkaline cleaning solution and rinsed with water. If any mold remains after first cleaning, try a solution of 1-quart bleach to a gallon of water. All surfaces must be completely dry at time of application.
PREVIOUSLY COATED	Apply to properly primed or previously coated surfaces (scuff glossy surfaces then clean). If immoderate period of time has past since coating was applied, then remove all dust, dirt, grease, or chemical contaminants by washing surface with Aervoe #399, 400, or 5070 Cleaner/Degreaser, a commercial detergent, or other suitable cleaner. Rinse thoroughly with water and allow to dry before application.

APPLICATION

For best results apply when air and surface temperatures are between 60° & 100° F (15° & 38° C), and the surface is at least 5° F above the dew point. Drying times and gloss may be adversely affected by extremely high or low relative humidity. This paint can tolerate application to clean, damp surfaces; however, conditions must allow the moisture to evaporate.

THINNING

Brush/Roller	No thinning is needed.
Air-Atomized Spray	Use up to 12% Water (approx. 1 pint per gallon)
Airless Spray	Use up to 10% Water (approx. 1 pint per gallon)
Cleanup	Soap and water

EQUIPMENT

Brush	Use a good quality natural or synthetic bristle brush. Apply with full brush using short strokes and avoid re-brushing or reworking material. For extremely smooth surfaces, brushing is not recommended.			
Roller	Use a good quality natural or synthetic cover. Use a short nap for smooth surfaces and a medium nap for rough surfaces.			
Air-Atomized Spray	Fluid Tip	Fluid Delivery	Atomizing Pressure	
Pressure	.043 - .070	8 - 12 oz. per minute	25 - 50 psi	
Siphon	.055 - .070	8 - 12 oz. per minute	35 - 60 psi	
Airless Spray	Pump Ratio	Fluid Tip	Fluid Pressure	Filter Mesh
	30:1 or 33:1	.013 - .017	2500 -3000 psi	60

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