



AQUACRON® MV488 SERIES WATER REDUCIBLE ENAMEL

DESCRIPTION:

AQUACRON® **MV488 SERIES Water Reducible Alkyd Enamel** is a fast drying interior/exterior enamel intended for industrial use on bare or primed metal surfaces. Suitable applications include wire racking, shelving, industrial machinery, utility trailers and general metal finishing.

HIGHLIGHTS:

- Fast dry
- Excellent applications properties
- Sprays well with AA-Airless and electrostatic equipment
- No recoat window
- Provides a wide balance of performance properties
- Available in wide range of colors
- Contains no heavy metals
- Low VOC
- Water reduction and clean-up
- Higher flashpoint than solvent borne coatings

TECHNICAL PROPERTIES:

PROPERTY	METHOD	RESULT*	
Color		MV488-1 White, MV488-9 Black Custom Colors	
Gloss @ 60° Angle	ASTM D523	90	
Pencil Hardness	ASTM D3363	HB – F	
Conical Mandrel	ASTM D522	Pass	
Adhesion	ASTM D3359	5B – Excellent	
Humidity Resistance – 150 Hrs.	ASTM D2247	Pass, no blisters	
Salt Spray Resistance – 150 Hrs.	ASTM B117	Pass, 2 – 3 mm scribe creep	
Substrates		CRS, HRS	
Recommended Primer(s)		See Compatibility Chart	

^{*}These results were obtained over iron phosphated cold rolled steel panels with a non-chrome sealer.

^{*}The MV488 will have limited performance properties when used exterior as a DTM.





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Physical Constants and Regulatory Information: (All values are theoretical, depend on color and are Ready-to-Spray. Actual values could vary slightly due to manufacturing variability.)

PHYSICAL PROPERTIES:

PROPERTY	MV488-1	MV488-9	Custom Colors*	
Percent solids (by weight)	41.99%	29.81%	35.4 ± 5%	
Percent solids (by volume)	28.52%	26.54%	27.5 ± 1%	
Organic HAPs	0.0 lbs./gal.	0.0 lbs./gal.	0.0 lbs./gal.	
Photo-chemically reactive	No	No	No	
Flashpoint	105°F	105°F	105°F	
Volume Ratio	As is	As is	As is	
Coverage (@ 1 mil, no loss)	458 sq. ft./gal.	426 sq. ft./gal.	425 – 458 sq. ft./gal.	
Shelf Life	9 mos.	9 mos.	9 mos.	
Applicable Use Category	Single-Stage Ctg.	Single-Stage Ctg.	Single-Stage Ctg.	
VOC Actual	1.31 lbs./gal.	1.21 lbs./gal.	1.26 ± 0.05 lbs./gal.	
	156.94 g/L	144.96 g/L	151 ± 3 g/L	
VOC Regulatory	2.8 lbs./gal.**	2.79 lbs./gal.	2.795 ± .005 lbs./gal.	
(less water less exempts)	337.84 g/L	334.24 g/L	335.5 ± 1.5 g/L	
Density	9.93 lbs./gal.	8.44 lbs./gal.	9.19 ± 0.75 lbs./gal.	
	1192 g/L	1013 g/L	± 6 g/L	
Volatiles by weight %	58.01 %	70.19%	64.15 ± 6%	
Water by weight %	44.79 %	55.49%	50.14 ± 5%	
Exempt weight %	0.0%	0.0%	0.0%	
Water volume %	53.39%	56.22%	54.8 ± 1.4%	
Exempt volume %	0.0%	0.0%	0.0%	

^{*}Values listed will be color and base dependent; formula specific Environmental Data Sheets can be generated upon request.

SURFACE PREPARATION:

The surface must be clean and free of all surface contamination such as oil, dirt, rust and foreign matter. A 3-stage iron phosphate chemical pretreatment such as PPG Chemfos[®] KA Cleaner and Chemseal Sealer system or similar conversion coating system and primer is recommended for adhesion and performance properties of the coating system over CRS substrates.

It is recommended that any alternate substrate be evaluated on a case by case basis to determine satisfactory adhesion.

Contact your PPG Sales Representative for additional substrate & primer recommendations.

APPLICATION DATA:

Mixing Instructions: Mix thoroughly before and during use

Wet Film Thickness: 3.5 – 4.0 mils Dry Film Thickness: 1.0 – 1.3 mils

Viscosity: 30 – 40 on a #3 EZ Zahn cup

Thinner: Water (up to 5% for conventional spray application)
Clean up: MV398C Equipment Cleaner or soap and warm water

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APPLICATION DATA, CONT.:

SPRAY APPLICATION	SPRAY EQUIPMENT ¹	TIP	FLUID PRESSURE (psi)	ATOMIZATION PRESSURE (psi)	FLUID NOZZLE	AIR NOZZLE
Conventional	Graco Air Pro Gun	N/A	20	52	1.4 mm (0.055")	289–784
Electrostatic	Graco Xs3 Gun	N/A	25	50	1.5 mm (0.059")	24A376
Air Assisted Airless	Graco G15 Gun & Merkur 15:1 Pump	M409	1050	20	N/A	249–596
HVLP	Graco Air Pro Gun	N/A	20	50 ² (inlet)	1.4 mm (0.055")	289–047
Airless	Graco Ultimate 695	RAC X FFT-310	1700	N/A	N/A	N/A

¹or equivalent

CURE SCHEDULE:

Air Dry (assumes 77°F & 50% Relative Humidity)

Bake/Force Cure

To Touch: 30 min. Flash Time: 10 min. (ambient) To Handle: 1-2 hrs. Substrate Temp: 150-220°F Recoat: 1 hr Bake Time: 10-30 min.

ADDITIONAL INFORMATION:

- Do not apply at temperatures below 50°F
- Protect from freezing
- In-Service Temperature: 120°F
- Excessive film thickness will retard dry times and can cause a recoat window issue
- ❖ Poor air movement in drying area will significantly increase dry time of product
- Not recommended for use on galvanized, galvaneal or zinc rich surfaces
- ❖ Parts can be placed outside after overnight dry (16 hours)

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²atomization pressure should read <10 psi @ the cap