

AQUACRON® MV390-9300 Waterborne Acrylic Primer

HIGHLIGHTS:

- Very fast drying
- Excellent corrosion protection
- Very good chemical resistance
- Can be used as a one coat primer/finish
- Able to topcoat w/WB acrylics and WR alkyd enamels the same day
- VOC of 1.78 lbs./gal. (less exempts)

RECOMMENDED
TOPCOATS / PRIMERS:

- AQUACRON MV380 Series topcoats
- AQUACRON MV488 Series topcoats
- AQUACRON 880 Series topcoats
- AQUACRON 890 Series topcoats

PRODUCT CODES / COLORS:

MV390-9300 / Gray

EXAMPLE PRODUCT USES

- Metal entry doors & jambs
- Metal racking
- Process equipment (pumps and blowers)
- Electrical equipment (switch gear & pad mounted transformers)

DESCRIPTION:

AQUACRON® MV390-9300 is a waterborne acrylic primer which provides excellent corrosion protection when used over a properly prepared surface. Does not require a topcoat.

TECHNICAL PROPERTIES:

PROPERTY	METHOD	RESULT
Adhesion	ASTM D3359	5B
Gasoline Resistance	Spot Test	Passes 4 hr. spot test
Gloss (60° angle)	ASTM D523	10 - 30 units
Humidity Resistance	ASTM D2247	250 hrs.
Pencil Hardness	ASTM D3363	F - H
Salt Spray Resistance	ASTM B117	1,000 hrs.* (using MV380 topcoat & MV390-9300 at 3.5-4.0 mils DFT) 250 hrs. av. (over non-chrome sealer)
Solvent Resistance (>50 DR w/Xylene, MEK & IPA)	ASTM D5402	Slight softening but recovers

*Performance tests were done on CRS B-1000 panels with chrome sealer

PHYSICAL PROPERTIES:

PROPERTY	VALUE
Coverage (@ 1 mil, no loss)	590 - 654 sq. ft./gal.
Flash Point	201°F
Shelf Life	1 year
VOC	1.78 lbs./gal. (less exempts)
VOE	0.91 lbs./gal. (actual)
Volume Solids	38.8 ± 2.0%
Weight per Gallon	10.9 ± 0.3 lbs./gal.
Weight Solids	54.2 ± 2.0%

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SUBSTRATES:

Aluminum	A fluoride containing pretreatment is required for adhesion
CRS, HRS	A pretreatment is required for adhesion & corrosion resistance
Fiberglass	Surface must be sanded or abraded to obtain adhesion
Galvaneal	A pretreatment is required for adhesion
Galvanized Steel	A pretreatment is required for adhesion
Plexiglas	Surface must be sanded or abraded to obtain adhesion
PVC Plastic	Surface must be sanded or abraded to obtain adhesion

CURE SCHEDULE:

To Touch*	20 - 30 min.
To Handle*	1 hr.
To Recoat*	2 hrs.
To Topcoat*	2 hrs. with the Aquacron MV Series topcoats
Force Dry	10 - 30 min. @ 150 - 220°F

*assumes 77°F & 50% relative humidity

ADDITIONAL INFO:

- Minimum cure temperature is 50°F
- Avoid exposure to ponding water for 5 - 7 hours
- If parts are force dried their restriction time to ponding water can be shortened
- Adhesion to aluminum, fiberglass, galvanized, galvaneal and plastic substrates may require sanding and/or a pretreatment for adhesion. A test sample is recommended before application.

SURFACE PREPARATION:

For mild exposure conditions the steel surface should be prepared according to the SSPC-SP2 Hand Tool Cleaning method. This calls for cleaning the surface by wire brushing, scraping, chipping and sanding. Surface must be clean and free of all surface contamination such as oil, dirt, rust and foreign matter. Any old paint or mill scale must be removed by abrasive blasting as outlined in SSPC-SP 6 (NACE No. 3) Commercial Blast Cleaning. For cold rolled steel, a 3-stage iron phosphate chemical pretreatment such as a PPG Chemfos® Cleaner and Chemseal Sealer system or similar conversion coating system will improve adhesion and performance properties of the total coating system and is required to achieve 1000 hour salt spray performance. A conversion coating containing fluoride is required for adhesion on aluminum substrates.

APPLICATION DATA:

APPLICATION	INSTRUCTION
Mixing Instructions	Stir thoroughly before using
Wet Film Thickness (mils)	4.0 - 10.0
Dry Film Thickness (mils)	1.5 - 3.5 (3.5 - 4.0 mils required for 1000 hr. salt spray)
Reduction Rate	5 - 15%
Reducer	Water or TFA880-70 Aquathin Refresher
Clean Up	Water or MV398C Equipment Cleaner
Viscosity	35 - 45" Zahn #4 cup

SPRAY APPLICATION:

Spray Application	Spray Equipment	Tip	Fluid Pressure (psi)	Atomization Pressure (psi)	Fluid Nozzle	Air Nozzle
Conventional	Graco Air Pro Gun*	NA	35	35	1.4 mm (.055")	289-784
Electrostatic	Graco Xs3*	NA	40	50	1.5 mm (.055")	24A376
Air Assisted Airless	Graco G15 Gub & Merkur 15:1 Pump*	M409	1125	32	NA	249-596
HVLP	Graco Air Pro*	NA	30	36** (inlet)	1.4 mm (.055")	288-047
Airless	Graco Ultimate 695*	RAC X LTX-517	1700	NA	NA	NA

*or equivalent

**atomization pressure should be <10 psi

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For more information contact:

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