# AQUACRON™

## 870 Series

## Waterborne Acrylic Polyurethane Enamel

**Product Data Sheet**

AQUACRON™ 870 Series is a low VOC, single component waterborne enamel that is made from an acrylic resin modified with a self-crosslinked polyurethane resin that gives the coating exceptional film properties. This enamel can be used as a low gloss smooth coat or as a textured coating over a wide variety of substrates, including: pretreated steel, pretreated aluminum, ABS, PVC, and polycarbonate.

### Substrates (Direct)

- Cold rolled steel
- Hot rolled steel
- Aluminum
- Galvanized
- Galvaneal

### Substrates (Over primer)

- Plastics[1]
- Fiberglass[1]

### Suggested Primers

- *Aquacron* 390-9300 Series

### End Use Markets

- Furniture
- Metal fabrication
- Medical device
- Electrical enclosures
- Industrial equipment

### Product Codes

- MV870LC – Low Gloss Clear
- MV870LW – Low Gloss White

### Product Highlights

- Very fast drying
- 1K polyurethane performance
- Excellent block resistance
- Tap water reduction and clean-up
- Excellent flexibility
- Can be textured
- No reportable HAPS
- VOC < 2.10 lbs. /gal. (252 g/L)

### Physical Properties

| Property | Value |
|---|---|
| Solids % by weight | 39.0 – 49.0 |
| Solids % by volume | 29.0 – 37.0 |
| Weight / Gallon | 9.4 – 10.3 lbs./gal. (1128 – 1236 g/L) |
| Coverage @ 1 mil, 100% TE | 465 – 593 ft.$^2$/gal. (43 – 55 m$^2$/3.785L) |
| 60° Gloss | 30 – 40 |
| Package viscosity | 35 – 40” Zahn #3 Cup |
| VOC (less water) | 2.00 lbs./gal. (240 g/L) |
| Shelf life | 1 year |

### Performance Properties

| Test | Result* |
|---|---|
| Pencil hardness | 2H |
| Conical mandrel (1/8”) | Pass |
| Adhesion | 5B, excellent |
| Salt Spray | 150 hours |
| Humidity | 150 hours |

*results obtained over iron phosphate CRS panels

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### Substrate Protection

The surface must be clean and free of all surface contamination. A chemical pretreatment such as PPG Chemfos® KA Cleaner/Coater or a similar conversion coating will improve the performance properties of the coating system. See your PPG Representative for recommendations.

### Cure Schedule

Paint film is not fully cured for 7 days. Drying time listed may vary, depending upon film build, color selection, temperature, humidity and degree of air movement.

### Physical Properties

| Air Dry Times[2] | |
|---|---|
| To Touch | 20 min. |
| To Handle | 1 hour |
| To Topcoat | 1 hour |
| **Force Dry Times** | |
| Flash Time | 15 – 20 min. (ambient) |
| Temperature | 180 – 220°F<br>(82 – 104°C) |
| Time at Temperature | 10 – 30 min. |

### Mix Directions

| | |
|---|---|
| Reduction | Water, up to 10% if needed |
| Line/Flush Clean Up | Soap and water, TFA880-70 or MV389C |

### Application

| | |
|---|---|
| Equipment | Conventional, HVLP, air-assisted airless, airless |
| Recommended Wet Film Build | 3.0 – 4.5 mils<br>76 – 114 microns |
| Recommended Dry Film Build | 1.0 – 1.5 mils<br>25 – 38 microns |

### Additional Information

| |
|---|
| In-Service Temperature: 180° (82°C) |
| Do not apply at temperatures below 50° (10°C) |
| Protect from freezing |

Footnotes

1. Due to the variability in plastic and fiberglass substrates, it's highly recommended to test adhesion on a small sample before application
2. Excess film thickness will retard dry times and affect the recoat window. Do not apply at temperatures below 50°F (10°C).



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