

# ESSENTIAL R5800

## FAST-DRYING, HIGH GLOSS ACRYLIC EMULSION

### DESCRIPTION

Essential R5800 is an APEO-free polymer formulated to deliver exceptionally high gloss and fast-drying systems with excellent flow and leveling properties. Engineered to be compatible with a wide variety of chemistries, R5800 may be blended with water-reducible resins, polyurethane dispersions or other emulsion polymers. It is shear stable and may be high speed dispersed or passed through certain media mills.

R5800 may be used to develop air dry or force-cured coatings. It exhibits exceptional pigment-wetting properties and will develop a high degree of DOI. This emulsion has excellent adhesion properties and may be applied over metal, wood, concrete, paper and a variety of plastic substrates. R5800 can be manufactured to form hard, mar-resistant films with good chemical resistant properties. Applications include industrial coatings, graphic arts and high performance architectural finishes.

### KEY BENEFITS

- Exceptional Gloss
- High DOI
- Excellent Mechanical Stability
- Excellent Adhesion

### TYPICAL PROPERTIES\*

Appearance	Milky-White Emulsion
pH	8.2
Solids, % by Weight	48.5
Solids, % by Volume	45.8
Viscosity, cP @ 25°C	150
Tg, °C	42
Density, Lbs./Gal.	8.8
VOC Level (As Supplied)	
Lbs./Gal.	0
G/L	0
Acid Number	40
Free/Thaw Stable	Passes 3 Cycles

*\*These values should not be interpreted as specifications.*

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F0409

TECHNICAL DATA

R5800

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## STARTING POINT FORMULATIONS

### Essential R5800 White Formulation

<u>MATERIALS</u>	<u>POUNDS</u>	<u>GALLONS</u>
ESSENTIAL R5800	189.7	21.63
BYK® 020	3.0	0.41
Ammonia	2.0	0.27
Water	25.0	3.00
Ti-Pure® R-706	200.0	6.00
<b>Grind to a 5+ Hegman</b>		
ESSENTIAL R5800	436.3	49.75
BYK® 024	4.0	0.48
Water	50.0	6.00
Dowanol® DPM	51.6	6.49
Dowanol® DPnB	39.5	5.22
Raybo® 60	10.0	1.08
Jonwax® 26	20.0	2.44
Nopco® DSX-1514	2.0	0.23
	<b>1033.1</b>	<b>103.00</b>
<b>Formulation Attributes:</b>		
Solids, % by Weight	50.0	
Solids, % by Volume	39.0	
Viscosity, Seconds Z#2	36	
pH	9.0	
Density	10.0	
Pigmented Volume Concentration (PVC), %	15.0	
Calculated VOC (Excluding Water)		
G/L	217	
Lbs./Gal.	1.81	

## SUPPLIER INFORMATION

<u>Product</u>	<u>Description</u>	<u>Supplier</u>
Essential R5800	Emulsion	Essential Industries
BYK® 020	Defoamer	BYK-Chemie
Ti-Pure® R-706	Titanium Dioxide	DuPont
BYK® 024	Defoamer	BYK-Chemie
Dowanol® DPM	Solvent	Dow Chemical
Dowanol DPnB	Solvent	Dow Chemical
Raybo® 60	Rust Inhibitor	Raybo Corporation
Nopco® DSX-1514	Thickener	Cognis
Jonwax® 26	Wax Emulsion	Johnson Polymer