



RayCryl 61 Technical Bulletin

Acrylic Emulsion Polymer

RayCryl 61 is an all acrylic polymer with outstanding exterior durability. The polymer is specifically designed with low surfactant levels, which provides excellent water resistance. RayCryl 61 has a higher level of solids, and is easy to formulate.

Suggested Uses

- Exterior architectural coatings
- Exterior architectural primers

Key Features

- Excellent water resistance
- Outstanding UV durability
- 100% acrylic

RayCryl 61 Typical Physical Properties

Polymer type	Acrylic Emulsion Polymer
Weight solids	59 – 61 %
Viscosity (Brookfield Model RVT)	100 – 1000 cps, #3/100 rpm
pH	9.0 – 9.5
Tg (MDSC)	11°C
MFFT (ASTM D-2354)	8°C
Particle Size (Mean)	0.35 microns
Surfactant Charge	Anionic
Weight per Gallon	8.90 lbs/gal
Bulking Value	0.1117 gal/lb
Freeze Thaw Stability	Do Not Freeze

For 40 years, Specialty Polymers has been developing state of the art resins for the paint and coatings industry. With more than 250 products to choose from, Specialty Polymers has the right polymer to meet your needs.

Suggested Formulations

RayCryl 61 – Eggshell Enamel

Raw Materials	Weight (lbs)	Volume (gal)	Supplier
Water	124.95	15.00	
Natrosol 330 PA	2.50	0.21	Hercules
Propylene Glycol	19.37	2.25	Eastman
Byk 022	2.00	0.24	Byk Chemie
Tamol 165A	9.25	1.03	Rohm and Haas
Triton CF-10	2.00	0.23	Dow Chemical
Ammonia (28%)	1.00	0.13	Eastman
R-902	250.00	7.51	Dupont
ASP 170	50.00	2.33	Huber
Water	166.60	20.00	
RayCryl 61	390.00	43.81	Specialty Polymers, Inc.
Byk 035	1.00	0.14	Byk Chemie
Texanol	12.00	1.52	Eastman
Proxel GXL	2.00	0.22	Arch Chemical
Polyphase 663	4.00	0.46	Troy Chemical
Water	26.28	3.15	
Optiflo L1400	10.00	1.18	Southern Clay Products
Optiflo H3300VF	5.00	0.59	Southern Clay Products
Total	1,077.95	100.00	

Typical Physical Properties

RayCryl 61 – Eggshell Enamel

Weight per gallon, lbs/gal	10.8	Viscosity, KU	100
Weight solids, %	50.6	pH	9.0
Volume solids, %	36.0	Gloss @ 60°	25
Coating VOC, g/L	100		

Suggested Coalescing Solvent

0 -10% Texanol, based on binder solids

Suggested Formulations

RayCryl 61 – White Exterior Flat

Raw Materials	Weight (lbs)	Volume (gal)	Supplier
Water	166.60	20.00	
Propylene Glycol	17.22	2.00	Eastman
Natrosol 330 PA	5.00	0.41	Hercules
Byk 024	1.00	0.12	Byk Chemie
AMP 95	1.00	0.13	Angus Chemical
Tamol 681	6.50	0.72	Rohm and Haas
Triton CF-10	2.00	0.23	Dow Chemical
R-902 TiO ₂	250.00	7.51	DuPont
Minex 4	110.00	5.07	Unimin
Optiwhite	50.00	2.73	Burgess Pigment
Celite 281	10.00	0.52	World Minerals
Water	166.60	20.00	
RayCryl 61	300.00	33.71	Specialty Polymers, Inc.
Byk 035	1.00	0.14	Byk Chemie
Texanol	13.50	1.71	Eastman
Proxel GXL	2.00	0.22	Arch Chemicals
Polyphase 663	4.00	0.46	Troy Chemicals
Water	26.31	3.15	
Optiflo L1400	7.50	0.88	Southern Clay Products
Optiflo H3300VF	2.50	0.29	Southern Clay Products
Total	1,142.73	100.00	

Typical Physical Properties

RayCryl 61 – White Exterior Flat

Weight per gallon, lbs/gal	11.4	Viscosity, KU	100
Weight solids, %	53.6	pH	9.0
Volume solids, %	36.1	Gloss @ 60°	<3
Coating VOC, g/L	100		

Suggested Coalescing Solvent

0 – 10 % Texanol, based on binder solids

Suggested Formulations

RayCryl 61 – Exterior Flat Ultradeep Base

Raw Materials	Weight (lbs)	Volume (gal)	Supplier
Water	166.60	20.00	
Propylene Glycol	17.22	2.00	Eastman
Natrosol 330 PA	5.00	0.41	Hercules
Byk 024	1.00	0.12	Byk Chemie
AMP 95	1.00	0.13	Angus Chemical
Tamol 681	5.00	0.56	Rohm and Haas
Triton CF-10	2.00	0.23	Dow Chemical
Minex 4	275.00	12.67	Unimin
Optiwhite	50.00	2.73	Burgess Pigment
Celite 281	10.00	0.52	World Minerals
Water	166.60	20.00	
RayCryl 61	300.00	33.70	Specialty Polymers, Inc.
Byk 035	1.00	0.14	Byk Chemie
Texanol	13.50	1.71	Eastman
Proxel GXL	2.00	0.22	Arch Chemicals
Polyphase 663	4.00	0.46	Troy Chemicals
Water	27.01	3.24	
Optiflo TVS-VF	5.00	0.57	Southern Clay Products
Optiflo H3300VF	5.00	0.59	Southern Clay Products
Total	1,056.93	100.00	

Typical Physical Properties

RayCryl 61 – Exterior Flat Ultradeep Base

Weight per gallon, lbs/gal	10.6	Viscosity, KU	105
Weight solids, %	49.8	pH	9.0
Volume solids, %	36.1	Gloss @ 60°	<3
Coating VOC, g/L	100		

Suggested Coalescing Solvent

0 – 10 % Texanol, based on binder solids

IMPORTANT INFORMATION

If any product is defective in workmanship or materials, Specialty Polymers, Inc. will replace the product. The information contained in this Technical Bulletin is intended to be a guideline. It is offered in good faith, but without guarantee. We recommend users of the product perform their own testing to determine the suitability of the product in their application.

www.specpoly.com

1-800-770-7523

info@specpoly.com