

ESSENTIAL R5138

SELF CROSS-LINKING ACRYLIC POLYMER

Essential R5138 is a translucent, pure acrylic designed for wood furniture refinishing. It has excellent adhesion to a wide variety of wood and excellent block resistant properties, as well as, superior scratch, stain and chemical resistance. R5138's small particle size imparts a unique clarity to the coating which can be observed both in the can and on the wood.

KEY BENEFITS

- Chemical and Stain Resistance
- Good in-can clarity
- APEO free
- Excellent adhesion to wood

DISCLAIMER: The information and recommendations contained herein are based on data believed to be correct. The information is offered solely for the customer's consideration, investigation and verification because of numerous factors beyond our control affecting the results of the use of products, Essential Industries, INC. makes no warranty of any kind, expressed or implied, including those of merchantability and fitness for a particular purpose, other than that the product conforms to its applicable current standard specification. The manufacturer's only obligation shall be to replace such quantity of the product proven to be defective.

TYPICAL PROPERTIES*

Appearance	Opaque White Emulsion
pH	9.0
Solids, % by Weight	40.0
Viscosity, cP @ 25°C.....	50
Tg	47°C
Density, Lbs./Gal.	8.8
VOC Level (As Supplied) Lbs./Gal. ..	0.05
G/L	6.4
Acid Number	32
Freeze/Thaw Stable	Passes 3 Cycles

*These values should not be interpreted as specifications.



The Spark of Innovation

Visit us on the web at
www.essentialpolymers.com

28391 Essential Road • P.O. Box 12
Merton, WI 53056-0012
(262) 538-0091 • FAX: (262) 538-1354

ESSENTIAL R5138

SELF CROSS-LINKING ACRYLIC POLYMER

Starting Point Formulation (FCE215)

Material	Amount
Essential R5138	789.6
Zetasperse-179	10.0

Premix the following water and solvents, then add slowly

DPnB	50.1
Water	117.2

Dynol 800	3.0
TEGO Foamex 825	3.0

Michelman 93235	26.1
Capstone FS-65	1.0
Total (FCE215)	1000

Formulation Attributes:

% Solids	33%
VOC < 100g/L	
Viscosity	0-100cps
Freeze/Thaw Stability	Passes 3 Cycles

ESSENTIAL R5138

SELF CROSS-LINKING ACRYLIC POLYMER

Performance Information

All tests were performed on coatings kept at 77°F for seven days before testing.

Tests Performed on Aluminum Panels (1-Mil Dry Films)

CS-10 Taber Abrasion (250 Cycles) 22.6 mg

Tests Performed on Maple Veneer (3 Coatings, 1-Mil Dry Per Coat) 1 Hour Covered Spot Test

Chemical Testing: 0- No effect 5- Extensive damage

	R5138	Competitor A	Competitor B
Vegetable Oil	0	0	0
Mustard	2	2	2
Red Wine	0	0	0
Red Wine Vinegar	0	0	0
Water	0	0	0
50% Ethanol	0	0	0
70% IPA	2	5	5
409 Solution	0	0	0
0.1N HCl	0	0	0
0.1N NaOH	0	0	0
1%Bleach	0	0	0

7-Day Konig

1-Mil Dry, Aluminum Panel.

7-days66 sec

ESSENTIAL R5138

SELF CROSS-LINKING ACRYLIC POLYMER

Supplier Information

PRODUCT

ESSENTIAL R5138
ZETASPERSE-179
DYNOL 800
TEGO FOAMEX 825
DOWANOL® DPNB
MICHELMAN 93235
CAPSTONE® FS-65

DESCRIPTION

ACRYLIC EMULSION
DISPERSANT
WETTING AGENT
DEFOAMER
SOLVENT
WAX EMULSION
SURFACTANT

SUPPLIER

ESSENTIAL POLYMERS
AIR PRODUCTS
AIR PRODUCTS
EVONIK
DOW CHEMICAL
MICHELMAN
DUPONT