

ESSENTIAL R5138

SELF CROSS-LINKING ACRYLIC EMULSION

Essential R5138 is a translucent, pure acrylic designed for wood furniture refinishing. It has excellent adhesion to a wide variety of woods. The polymer'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

- Small particle size
- 100% acrylic
- Chemical and stain resistance

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	Translucent White
pH.....	9.0
Solids, % by Weight	40.0
Viscosity, cps @ 25°C	< 100
Density, lbs/gal	8.8
% VOC	0.1
Tg °C	47
Acid Number	32
Freeze/Thaw Stability	Passes 3 cycles
Konig Hardness (secs).....	66

*These values should not be interpreted as specifications.



The Spark of Innovation

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Starting Point Formulation

Ingredients

	<u>FCE215</u>
Essential R5138	789.6
Zetaspere-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	<u>1000</u>

Physical Properties:

% Solids	33%
pH	8.70
VOC	< 100 g/L
Viscosity	< 50 cps
Wt/GI	8.75

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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

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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