

ESSENTIAL R5809

STAIN-RESISTANT ACRYLIC EMULSION

Essential R5809 is an acrylic polymer designed for the formulation of stain-resistant waterborne sealers and coatings. Formulations based on R5809 will give excellent resistance to coffee, iodine, mustard, tea and many other staining agents. Formulated products exhibit outstanding mar resistance and toughness over substrates such as wood, concrete, plastic and metal. These products form fast-drying, hard films which are exceptionally clear and glossy with fast recoatability, water resistance and excellent leveling.

KEY BENEFITS

- Excellent stain resistance
- Fast-drying
- Clarity
- Hard film

TYPICAL PROPERTIES*

Appearance	Milky-White Emulsion
pH	9.0
Solids, % by Weight	40.0
Solids, % by Volume	37.0
Viscosity, cP @ 25°C.....	70
Tg	68°C
Density, Lbs./Gal.	8.7
VOC Level (As Supplied)	
Lbs./Gal.	0.1
G/L	13.1
Acid Number	26
Freeze/Thaw Stable	Passes 3 Cycles

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

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.



EssentialTM
Polymers

The Spark of Innovation

Visit us on the web at
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Starting Point Formulations

Essential R5809 / R4188 Blend – Clear Wood Sealer / Topcoat

MATERIALS	POUNDS	GALLONS
Essential R5809	492.3	56.45
Essential R4188	129.6	14.72
Dynol® 604	3.4	0.41
Tego® Foamex 800	2.0	0.23
Premix Next Three Items:		
Water	129.9	15.60
Dowanol® DPM	17.2	2.17
Dowanol® DPnB	44.3	5.86
Then Add:		
Jonwax® 26	29.0	3.53
Tego® Glide 440	1.6	0.20
Tego® Foamex 800	2.0	0.23
Zonyl® FSJ	0.9	0.09
Tafigel PUR 40	4.5	0.51
	856.7	100.00

Formulation Attributes:

Solids, % by Weight	30.3
Solids, % by Volume	27.6
Viscosity, Seconds Z#2	35-40
Calculated VOC (Excluding Water)	
Lbs./Gal.	1.99
G/L	238

Essential R5809 Clear Wood Lacquer

MATERIALS	POUNDS	GALLONS
Essential R5809	650.0	74.54
BYK® 025	2.5	0.31
Premix Next Two Items:		
Water	91.1	10.93
Dowanol® DPnB	78.0	10.32
Tego® Glide 440	2.0	0.24
Jonwax® 26	27.0	3.29
Acrysol® RM-825	3.2	0.37
	853.8	100.00

Formulation Attributes:

Solids, % by Weight	31.4
Solids, % by Volume	28.7
Viscosity, Seconds Z#2	35
pH	8.7
Density	8.5
Calculated VOC (Excluding Water)	
Lbs./Gal.	0.97
G/L	116



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Performance Information

Tests Performed on Oak Veneer After a Seven Day Dry (2 Coats, 1-Mil Dry Per Coat)

1 Hour Covered Spot Test (Initial, Recovered)

Water No Effect
50% EtOH..... Moderate, Slight
70% IPA Moderate, Complete Recovery
KCMA Soap Solution..... No Effect

Supplier Information

<u>Product</u>	<u>Description</u>	<u>Supplier</u>
Essential R5809	Emulsion	Essential Polymers
Essential R4188	PUD	Essential Polymers
Jonwax® 26	Wax Emulsion	BASF
Surfynol® CT-324	Dispersant	Air Products
BYK® 025	Defoamer	BYK Chemie
Dowanol® DPnB	Solvent	Dow Chemical
Dowanol DPM	Solvent	Dow Chemical
Tego® Glide 440	Mar Inhibitor	Evonik Industries
Acrysol® RM-825	Thickener	Dow Chemical
Dynol® 604	Wetting Agent	Air Products
Tego® Foamex 800	Defoamer	Evonik Industries
Zonyl® FSJ	Fluorosurfactant	Dow Chemical
Tafigel® PUR 40	Thickener	Ultra Additives



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