

ESSENTIAL R6055

SELF-CROSS-LINKING WATERBORNE ACRYLIC/URETHANE POLYMER

Essential R6055 is a solvent-free version using our proprietary self-cross-linking Acrylic/Urethane technology. Essential R6055 can be formulated into < 100 g/l VOC water-based wood coatings. These coatings exhibit outstanding durability and gloss retention because of the polycarbonate backbone in the polyurethane component of the polymer.

R6055 also is a great candidate to create topcoats for the wood furniture and kitchen cabinets because of its excellent chemical and stain resistance properties.

KEY BENEFITS

- Solvent-free
- Create < 100g/l VOC coatings
- Outstanding gloss retention
- Outstanding Mar and Scratch 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	Off White Emulsion
pH.....	8
Solids, % by Weight	35%
Viscosity, cP @ 25°C	
Brookfield, LV2, 60rpm.....	< 50
Density, Lbs./Gal.....	8.75
VOC Level (As Supplied)	
Lbs./Gal.	< 0.125
g/L.	< 15
Freeze/Thaw Stable	Passes 3 Cycles

*These values should not be interpreted as specifications.



The Spark of Innovation

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ESSENTIAL R6055

Self-Cross-Linking Waterborne Acrylic/Urethane Polymer

Starting Point Formulation

Essential R6055 – < 100 g/l top coat Gloss

INGREDIENTS

Essential R6055
Dipropylene glycol monobutyl ether
Tego® Foamex™ 825
Tributoxyethyl phosphate
35% solids wax emulsion of Licowax™ PED 191
Dynol® 800

ALX243B

931
32.4
4.5
7.9
23.2
0.5

Chemguard™ S500

0.5

TOTAL:

1000.00

Physical Properties

% Solids 33.5%
pH 7.8
VOC < 100 g/l
Viscosity < 50 cps
WT/gal..... 8.71

Performance Information

Konig Hardness (seconds) 1 Day, 7 Day.....55, 78
Pencil Hardness (7 day) H

Supplier Information

PRODUCT

Tego® Foamex 825
Licowax® PED 191
Dynol®
Chemguard® S550

DESCRIPTION

Defoamer
Wax Emulsion
Leveling Agent
Leveling Agent

SUPPLIER

Evonik
Clariant
Air Products
Chemguard

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Self-Cross-Linking Waterborne Acrylic/Urethane Polymer

Tests Performed on Maple (1 coat sanding sealer - 2 coats top coat)

1 Hour Covered Spot Test

Vegetable Oil	No Effect
Red Wine	No Effect
Red Wine Vinegar.....	No Effect
Water	No Effect
50% Ethanol	Slight softening, recovered
70% Isopropanol.....	Slight softening, recovered
Formula 409.....	No Effect
0.1 Normal HCl.....	No Effect
10% NaOH.....	No Effect
1% Bleach	No Effect