

# ESSENTIAL R6055

## SELF CROSS-LINKING URETHANE/ACRYLIC POLYMER

R6055 is a solvent-free version of R6025 that uses our proprietary self cross-linking urethane/acrylic technology. R6055 can be formulated into < 100 g/l VOC water-based wood coatings. These coatings exhibit outstanding durability and gloss retention because of the polyurethane backbone on the polyurethane component of the polymer.

### 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 ....	Translucent White to Tan
pH.....	8.0
Solids, % by Weight .....	35.0
Viscosity, cps @ 25°C .....	< 50
Density, lbs/gal .....	8.8
% VOC .....	< 0.5
Tg °C .....	33
Acid Number .....	26
Freeze/Thaw Stability ....	Passes 3 cycles
Konig Hardness (secs).....	78

\*These values should not be interpreted as specifications.



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# ESSENTIAL R6055

Self Cross-Linking Urethane/Acrylic Polymer

## Starting Point Formulation

Essential R6055 – < 100 g/l top coat Gloss

### INGREDIENTS

Essential R6055	931
Dipropylene glycol monobutyl ether	32.4
Tego® Foamex™ 825	4.5
Tributoxyethyl phosphate	7.9
35% solids wax emulsion of Licowax™ PED 191	23.2
Dynol® 800	0.5
Chemguard™ S500	0.5
<b>TOTAL:</b>	<b>1000.00</b>

### ALX243B

## 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 Urethane/Acrylic 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