

# ESSENTIAL R6015

## SELF-CROSS-LINKING URETHANE ACRYLIC POLYMER

### **DESCRIPTION**

Essential R6015 is a single component, self-cross-linking, water-based urethane acrylic polymer. It can be formulated into low VOC coatings which show exceptional durability, chemical, mar and scuff resistance.

Formulations based on R6015 dry rapidly, allowing for several coats to be applied during the same day. It shows excellent adhesion to concrete and wood.

### **KEY BENEFITS**

- Low VOC Demand
- One Package, Self-Cross-Linking
- Exceptional Chemical Resistance
- Outstanding Mar and Scuff Resistance
- Fast Dry

### TYPICAL PROPERTIES\*

Appearance	Off-White Emulsion
pH	7.0
Solids, % by Weight	36.5
Solids, % by Volume	33.4
Viscosity, cP @ 25°C - Brookfield, LV2,	60rpm 20
Density, Lbs./Gal.	8.7
VOC Level (As Supplied)	
Lbs./Gal.	1.1
G/L	132
Freeze/Thaw Stable	Protect From Freezing

<sup>\*</sup>These values should not be interpreted as specifications.

#### Visit us on the web at www.essentialrmd.com

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<sup>\*</sup> 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.

### **ESSENTIAL R6015**

### **STARTING POINT FORMULATION**

### **Essential R6015 - Clear Formulation**

<u>MATERIALS</u>		<u>POUNDS</u>	<u>GALLONS</u>
ESSENTIAL R6015		834.9	95.9
Premix Next Three Items:			
Water		15.0	3.5
CoatOSil® 1211		16.8	0.10
BYK <sup>®</sup> 028		<u>3.3</u>	<u>0.50</u>
		870.0	100.0
Formulation Attributes:			
Solids, % by Weight	37.0		
Solids, % by Volume	34.8		
Viscosity, CP	30.0		
pH	7.20		
Density	8.70		
Calculated VOC (Excluding Water)			
Lbs./Gal.	1.09		
G/L	131		

### **PERFORMANCE INFORMATION**

All tests were performed on coatings kept at 77°F and 50% RH for seven days.

Tensile Strength, PSI 2860 Elongation at Break, % 90

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

Konig Hardness (Seconds)

1 Day -72 7 Day-72

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

Water No Effect
Soda No Effect
Beer No Effect

Formula 409 Slight Film Damage
100% Ethanol Softening, Full Recovery
50% Ethanol Slight Softening, Full Recovery
70% Isopropyl Alcohol Softening, Full Recovery

### **SUPPLIER INFORMATION**

<u>Product</u>	<u>Description</u>	<u>Supplier</u>
Essential R6015 BYK® 028	Polyurethane Dispersion Defoamer	Essential Industries BYK Chemie
CoatOSil® 1211	Leveling Agent	<b>GE Advanced Materials</b>