

# ESSENTIAL R4400

## HYDROXYL-FUNCTIONAL URETHANE/ACRYLIC HYBRID

### DESCRIPTION

Essential R4400 is a solvent free, low VOC OH-functional Urethane Acrylic Hybrid perfectly suited for formulating into 2-component coatings for wood and concrete. Once properly cross-linked with a trimer; such as, Easaqua 803 or Easaqua XL-600, this coating has superior chemical resistance and unsurpassed mar and scratch resistance properties.

### KEY BENEFITS

- Hydroxyl-functionality
- Skydrol Resistant
- Outstanding Mar Resistance

### TYPICAL PROPERTIES\*

Appearance	Translucent
pH	8.0
Solids, % by Weight	30
Viscosity, cP @ 25C	< 200 cps
Density, Lbs./Gal.	8.75
VOC Level (As Supplied)	
Lbs./Gal.	0.33
G/L	40
Particle Charge	Anionic
Acid Number	21
Hydroxyl Number	15

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

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\*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.

D2612

TECHNICAL DATA

R4400

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## STARTING POINT FORMULATION

### ESSENTIAL R4400 Clear Gloss 2-K Coating

<u>MATERIALS</u>	<u>POUNDS</u>
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#### Part A Ingredients:

Essential R4400	683.1
Dipropylene Glycol Butyl Ether	13.7

#### Premix the following ingredients:

Water	164.6
Dipropylene Glycol Methyl Ether	8.0
Tego Foamex 822	8.8
Capstone FS-65	1.8
	<b>880.0</b>

#### Part B Ingredients:

Easaqua XD 803	<b>120.0</b>
TOTAL:	1000.0 LBS

VOC content < 205 g/l

## PERFORMANCE INFORMATION

All tests were performed on coatings applied at 77°F and 50% Relative Humidity and cured for 7 days.

Tests performed on aluminum panels (1-mil dry films)

Konig Hardness (seconds): **1 day - 100**    **7 day - 130**

Test performed on concrete test blocks (2 coats), 1 hour covered spot test.

Water.....	No Effect	70% Isopropanol.....	Slight Softening, Full Recovery
50% Ethanol.....	No Effect	Beer.....	No Effect
10% Ammonia.....	No Effect	Pickle Juice.....	No Effect
Red Wine Vinegar.....	No Effect	Mustard.....	Faint Stain, Full Recovery
Beet Juice.....	No Effect	Skydrol Hydraulic Fluid.....	No Effect
Coca Cola.....	No Effect	6 Hour Vinegar Spot Test.....	No Effect
Tomato Juice.....	No Effect		

## SUPPLIER INFORMATION

<u>Product</u>	<u>Description</u>	<u>Supplier</u>
Essential R4400	Urethane/Acrylic Hybrid	Essential Industries
Tego® Foamex	Defoamer	DEGUSSA
Capstone® FS-65	Leveling Agent	DuPont
Easaqua™ X D 803	Cross-Linking Agent	Perstorp