

# Starting Formulation

## SF 1042

### Highly Flexible Gloss White Enamel

### EPON™ Resin 1001-CX-75 / EPIKURE™ Curing Agent 3164

**Introduction** This formulation illustrates the use of a highly flexible curing agent to impart stress relieving properties when applied as a solventborne coating over various substrates. This combination of properties together with good adhesion and high gloss suggests uses as either a primer or topcoat for areas that are subject to impact stresses such as railcar coatings, tank coatings, durable concrete coatings and other high wear applications.

- Features**
- Good adhesion to a variety of substrates
  - Resistant to amine blush (sweatout)
  - Imparts highly flexible properties
  - Improved abrasion resistance

Formula	<u>Material</u>	<u>Supplier</u>	<u>Pounds</u>	<u>Gallons</u>
Part A				
	Rutile Titanium Dioxide		397.5	11.42
	Anti Terra™ U	BYK Chemie	3.9	0.53
	EPON Resin 1001-CX-75	Hexion	427.9	47.75
	Beetle™ U216-8	Cytec Industries	17.1	2.04
	Xylene		237.8	33.21
	Butyl OXITOL™ Glycol ether	Shell Chemical Company	<u>37.6</u>	<u>5.05</u>
	<b>Total Part A</b>		<b>1,121.82</b>	<b>100.00</b>
Part B				
	EPIKURE Curing Agent 3164	Hexion	204.1	25.01
	2-Propoxyethanol		50.2	6.61
	Xylene	Shell Chemical Company	108.4	15.07
	GE SR-882M	Momentive Performance Materials	<u>28.3</u>	<u>3.31</u>
	<b>Total Part B</b>		<b>390.8</b>	<b>50.00</b>
	<b>Total Part A &amp; B</b>		<b>1,512.62</b>	<b>150.00</b>

#### Mixing Instructions

Pounds                      Gallons

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Part A	1,121.82	100.00
Part B	<u>390.8</u>	<u>50.00</u>
Part A + B	1,512.62	150.00

Typical Formulation Table 1 / Formulation Properties  
Properties

	<u>Units</u>	<u>Value</u>
Mix ratio Part A : Part B	By volume	2 : 1
	By weight	2.87 : 1.0
Total weight solids	%	63.1
Total volume solids	%	47.8
Pigment volume concentration (PVC)	%	16.5
Volatile Organic Compound (VOC)	lb/gal	3.73
	g/L	447.9
Viscosity @ 25°C		
Part A + Part B	KU	75

Cured film Properties Table 2 / Cured film Properties

	<u>Units</u>	<u>Value</u>
Film hardness, 3 days		HB
Direct impact	In-lbs	> 160
Reverse impact	In-lbs	> 160
Specular gloss		
60 Degrees		99
20 Degrees		64
Flexibility, Mandrel test	%	> 32

Storage Recommendations regarding storage conditions can be obtained by visiting our web site at [www.hexion.com](http://www.hexion.com)

General Information

These are starting formulations and are not proven in the user's particular application but are simply meant to demonstrate the efficacy of the products and to assist in the development of the user's own formulation. It is the user's responsibility to fully-test and qualify the formulation, along with the ingredients, methods, applications or equipment identified herein ("Information"), by the user's knowledgeable formulator or scientist, and to determine the appropriate use conditions and legal restrictions, prior to use of any Information.

Safety, Storage & Handling

Please refer to the MSDS for the most current Safety and Handling information.

Exposure to these materials should be minimized and avoided, if feasible, through the observance of proper precautions, use of appropriate engineering controls and proper personal protective clothing and equipment, and adherence to proper handling procedures. None of these materials should be used, stored, or transported until the handling precautions and recommendations as stated in the Material Safety Data Sheet

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