

## **G-CURE® 107A70**

### **Use**

G-Cure® 107A70 Acrylic Resin is a hydroxyl functional acrylic copolymer designed to produce low VOC high performance coatings. Coatings with an application VOC of 3.0 pounds/gallon can be produced. G-Cure® 107A70 Acrylic Resin readily crosslinks at room temperature with aliphatic polyisocyanates.

G-Cure® 107A70 Acrylic Resin can be used in heavy-duty maintenance and industrial coatings. Coatings formulated with this resin exhibit excellent chemical and weathering resistance with very good gloss retention characteristics. Other uses are in railcar, bridge and heavy equipment coatings.

### **Composition**

#### ACRYLIC RESIN

### **Specification**

Non Volatile (% by Weight)	68.5 - 71.5
Viscosity (cps @ 25 °C)	1500 - 2500
Color - APHA	100 max
Hydroxyl Value (100 % Solids)	114 - 129

### **Additional data**

Non Volatile (% by weight)	70
Viscosity (cps @ 25 °C)	2000
Color- APHA	50
Hydroxyl Value (100 % Solids)	122
Hydroxyl Equivalent Weight (HEW)	
100% Solids	460
As Supplied	655
WPG (lbs/gallon @ 25 °C)	8.5
Flash Point	101 °F
(Setaflash Closed Cup)	
% Volatile by Volume	37
Solvent Composition	100
(% by weight)	
Methyl n-Amyl Ketone	

## **Application**

## **Reaction Ratios**

To obtain optimum performance, stoichiometric proportions of G-Cure® 107A70 Acrylic Polyol Resin and a polyisocyanate should be reacted. The reaction ratio is calculated from the hydroxyl equivalent weight of the acrylic resin and the isocyanate equivalent weight of the polyisocyanates resin.

**For aliphatic polyisocyanates, the recommended ratio based is:**

655 grams G-Cure® 107A70 Acrylic Resin  
191 grams Tolonate HDT <sup>1</sup>

**Or**

655 grams G-Cure® 107A70 Acrylic Resin  
194 grams Desmodur N-3300 <sup>2</sup>

**Or**

655 grams G-Cure® 107A70 Acrylic Resin  
255 grams Tolonate HDB 75BX <sup>1</sup>

**Or**

655 grams G-Cure® 107A70 Acrylic Resin  
255 grams Desmodur N-75 <sup>2</sup>

<sup>1</sup> Rhodia Inc.

<sup>2</sup> Bayer Corp.

## **Miscellaneous**

## **PACKAGING, STORAGE AND HANDLING**

G-Cure® 107A70 Acrylic Resin can be stored in sealed containers for at least a year. G-Cure® 107A70 Acrylic Resin may turn opaque when stored at temperatures below 30 °F. If this should occur, bring the resin to a warmer location, above 40 °F, until normal resin clarity returns. Resin performance is unaffected by these storage conditions provided the resin appearance is clear before being used.

G-Cure® 107A70 Acrylic Resin requires "flammable liquid labeling" according to the Department of Transportation.

### **Availability**

G-Cure® 107A70 Acrylic Resin is supplied in 55-gallon drums containing 460 pounds net. Shipments are made from Kankakee, IL and also conveniently located warehouses. Additional information and samples are available on request from COGNIS Corporation, Coatings & Inks Division, 300 Brookside Ave., Ambler, PA 19002.

**Revision-No.**

0-09.2000 Effective October 1, 2000

Subject to appropriate storage under the usual storage and temperature conditions, our products are durable for at least 1 year.

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Suggestions of processing and using our products are given with best knowledge and information but without obligation. COGNIS does not accept any guarantee to the suitability of a product for the user's specific purpose. Furtheron the user himself assumes a liability to follow all legal regulations by using our products. The user can only pass on our sample to third parties with previous assent of COGNIS.

