

TECHNICAL DATA SHEET

SYNOCURE® 867BA-60

Acrylic polyol

PRODUCT APPLICATION DETAILS

SYNOCURE® 867BA-60 IN is a hydroxy functional acrylic designed to crosslink at room temperature with polyisocyanates.

SYNOCURE® 867BA-60 IN is especially recommended for coatings where outdoor durability and resistant properties are of prime importance

SALES SPECIFICATIONS

	CHARACTERISTICS	METHODS
Solid content (at 125°C, 1gm, 1hr)	58 - 62 %	ISO 3251
Viscosity (Brookfield Viscometer) (at 25°C)	35 - 60 P	ISO 3219
Color	1 max Gardner	ISO 4630
Acid value	8 max mg KOH/g	ISO 2114

OTHER CHARACTERISTICS¹

	CHARACTERISTICS	METHODS
Volatile	Butyl Acetate	
Flash point	24 °C	ISO 3679
Density (at 20°C)	1.02 g/ml	ISO 2811
Hydroxyl content	2.8 %	
Hydroxyl equivalent weight	600	

Acid value and/or Hydroxyl value quoted relative to solid resin

¹The data provided for these properties are typical values, intended only as guides, and should not be construed as sales specifications

MARKETS

Coatings & Inks

- Industrial Coating
 - Automotive - Refinish
 - General Industry
 - Wood Furniture
 - Automotive - Oem - Exterior

PERFORMANCE BENEFITS

- Excellent chemical and stain resistance
- Good durability
- Excellent adhesion
- Long pot life

SYNOCURE® 867BA-60

FORMULATION GUIDELINES

RECOMMENDATIONS FOR USE

SYNOCURE® 867BA-60 IN should be mixed with the selected polyisocyanate just prior to application. The mixing ratio is not critical, although it is preferable to use stoichiometric ratios to obtain optimum performance.

The reaction ratio is calculated from the respective equivalent weight or hydroxyl and isocyanate content of the reactants. The relationship is:

Hydroxyl equivalent weight = $17 \times 100/\% \text{ OH}$

Isocyanate equivalent weight = $42 \times 100/\% \text{ NCO}$

Using Desmodur® N 75 series ⁽¹⁾ or Tolonate™ HDB 75 MX ⁽²⁾, the recommended ratios would be:

-on solid resin: SYNOCURE® 867BA-60/Tolonate™ HDB 75 MX ⁽²⁾ = 600/191

-as supplied: SYNOCURE® 867BA-60/Tolonate™ HDB 75 MX ⁽²⁾ = 1000/255

When mixed with polyisocyanates in stoichiometric proportions, SYNOCURE® 867BA-60 IN has a pot life in excess of 8 hours at temperatures from 15°C to 30°C. This usable period will be reduced in high temperature conditions or when catalysts are used.

The initial curing rate can be increased by the use of tin or zinc catalysts such as dibutyl tin dilaurate or zinc octoate. The levels used will depend on the specific requirements, but typical metal contents calculated on total solid resin are 0.001% tin and 0.0015% zinc.

Coatings prepared from SYNOCURE® 867BA-60 IN and stoichiometric quantities of polyisocyanates will have sand dry times of approximately 15min and hard dry times of 1h.

SOLUBILITY

Solvents used in systems containing SYNOCURE® 867BA-60 IN should be low water content grades and not contain chemical groups (such as hydroxyl) which will react with isocyanates and thereby inhibit the film forming reaction. Esters and ketones are true solvents for this type of system, usually combined with aromatic hydrocarbon diluents.

Notes: ⁽¹⁾ Covestro, ⁽²⁾ Vencorex Chemicals

PRODUCT SAFETY

Please refer to the corresponding Safety Data Sheet.

STORAGE AND HANDLING

SYNOCURE® 867BA-60 should be stored indoors in the original, unopened and undamaged container, in a dry place at a temperature not exceeding 30°C. Exposure to direct sunlight should be avoided. In the above mentioned storage conditions the shelf life of the resin will be from the date of manufacturing.

Shelf Life (Months): 12

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