

## TECHNICAL DATA SHEET

# SYNOCURE® 803X-65

Acrylic polyol

### PRODUCT APPLICATION DETAILS

SYNOCURE® 803X-65 is a hydroxyl functional acrylic resin developed for use in compliant two component systems when cured with polyisocyanate.

### SALES SPECIFICATIONS

	CHARACTERISTICS	METHODS
Solid content (at 125°C, 1gm, 1hr)	63 - 67 %	ISO 3251
Viscosity (Brookfield Viscometer) (at 25°C)	150 -200 P	ISO 3219
Color	1 max Gardner	ISO 4630
Acid value	12 max mg KOH/g	ISO 2114

### OTHER CHARACTERISTICS<sup>1</sup>

	CHARACTERISTICS	METHODS
Volatile	Xylene	
Flash point	24 °C	ISO 3679
Density (at 20°C)	1 g/ml	ISO 2811
Hydroxyl content	2.4 %	
Hydroxyl equivalent weight	710	

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

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

### MARKETS & APPLICATIONS

#### Coatings & Inks

- Industrial Coating
  - Automotive - OEM
  - Automotive - Refinish
  - General Industry
  - Wood Furniture

### PERFORMANCE BENEFITS

- Longer Pot Life
- Good flexibility and hardness
- Good gloss
- Good exterior durability
- Good all round performance

# SYNOCURE® 803X-65

## FORMULATION GUIDELINES

### RECOMMENDATIONS FOR USE

SYNOCURE® 803X-65 should be mixed with the selected polyisocyanate just prior to application. Stoichiometric mixing ratios are recommended to obtain optimum performance. Alternative ratios may be suitable for some applications, but should be evaluated by the coating formulator beforehand.

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

-On Solids: SYNOCURE® 803X-65/ Desmodur N-75 = 710/191

-As Supplied: SYNOCURE® 803X-65 / Desmodur N-75 = 1090/255

### SOLVENTS:

The solvents chosen for paints and lacquers based on SYNOCURE® 803X - 65 should be free of water and should not contain groups that react with isocyanates. Ester and Ketones are True solvents and aromatic hydrocarbons are used as diluents.

POT LIFE: SYNOCURE® 803X-65 reacted with Desmodur N75 in stoichiometric proportions has a usable pot life at spraying viscosity in excess of a full working day at normal room temperature. The use of catalysts or higher temperatures will reduce this storage period, although paints will still remain usable for several hours.

### CATALYSTS:

To increase the initial rate of cure of SYNOCURE® 803X-65 based paints, at both ambient temperature and under low bake conditions, the use of tin catalyst in the form of dibutyl tin dilaurate is recommended. The level used will depend on specific requirements, but the recommended minimum level would be 0.001% tin calculated on total solid resin plus isocyanate.

Notes: Desmodur N-75 from Bayer

## PRODUCT SAFETY

Please refer to the corresponding Safety Data Sheet.

## STORAGE AND HANDLING

SYNOCURE® 803X-65 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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