SYNOCURE® 570 X 65

Hydroxyl Functional Acrylic, 3.1% OH

Product Information

SYNOCURE® 570 X 65 is a hydroxyl functional acrylic resin developed for use in two component systems when cured with polyisocyanate.

SYNOCURE® 570 X 65 is recommended for the formulations, and is particularly recommended where higher application solids and excellent exterior durability is required.

Characteristics of **SYNOCURE® 570 X 65** based coatings include:

- Long pot life
- Excellent drying time
- Excellent exterior durability

Sales Specification

Non-volatile content at 125°C, % (ISO 3251)	64 – 66
Viscosity at 25°C, mPa.s (ISO 3219)	5,000 – 8,000
Colour, Gardner scale (ISO 4630)	Max. 1
Acid value, mg KOH/g (ISO 2114)	Max. 10

Other Properties

Volatile	Xylene
Density at 20°C, g/cm^3 (ISO 2811)	1.03
Hydroxyl Content, %	3.1
Hydroxyl Equivalent Weight (on resin solid)	550

Noted: Acid value & hydroxyl content quoted relative to solid resin

Recommendations for Use

SYNOCURE® 570 X 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.

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

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

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

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Conventional polyisocyanates such as Desmodur N75 (1) and Desmodur N3390 (2) can be used successfully. The recommended ratios would be:

	on solid resin	as supplied
SYNOCURE® 570 X 65	550	845
Desmodur N75 (1)	191	255
Desmodur N3390 (2)	191	212

SOLUBILITY

The solvents chosen for paints and lacquers based on **SYNOCURE® 570 X 65** should be free of water and should not contain groups that react with isocyanates.

POT LIFE

SYNOCURE® 570 X 65 reacted with Desmodur N75 or Desmodur N3390 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.

CATALYST

To increase the initial rate of cure of **SYNOCURE® 570 X 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 strongly 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: (1) Bayer (2) Bayer

Precautions for Use

Please refer to corresponding Safety Data Sheet.

Storage Recommendations

SYNOCURE® 570 X 65 should be stored indoors in the original containers in a dry place at temperature between 5°C and 30°C. Avoid exposure to direct sunlight or frost.

Shelf Life

Under the above mentioned storage conditions the shelf life of the resin will be 12 months.

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