

SYNOCURE 867 S 57

Hydroxyl Functional Acrylic, 2.8% OH

Product Information

SYNOCURE 867 S 57 is a hydroxyl functional acrylic resin designed to crosslink at room temperature with polyisocyanates.

SYNOCURE 867 S 57 possess the following outstanding features:

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

Sales Specification

Non-volatile content, % (ISO 3251)	55– 59
Viscosity at 25°C, mPa.s (ISO 3219)	3,000 – 5,000
Colour, Pt/Co scale (DIN EN 1557)	Max. 70
Acid value, mg KOH/g (ISO 2114)	Max. 6

Other Properties

Volatile	Xylene : Methoxy propyl acetate (3:1)
Density at 20°C, g/cm ³ (ISO 2811)	1.02
Hydroxyl content, %	2.8
Hydroxyl equivalent weight (on solid resin)	600

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

Recommendations for Use

SYNOCURE 867 S 57 should be mixed just prior to application with the selected polyisocyanate. 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:

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

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

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

	on solid resin	as supplied
SYNOCURE 867 S 57	600	1050
Desmodur N 75 ⁽¹⁾	191	255
Tolonate HDB 75 MX ⁽²⁾	191	255

At normal temperature, the surface drying time of paints based on this combination is typically 15 min, with hard dry in 1 hour.

SYNOCURE 867 S 57 reacted with Desmodur N 75⁽¹⁾ or Tolonate HDB 75 MX ⁽²⁾ in stoichiometric proportions has a usable pot life in excess of 40h at normal room temperatures. The use of catalysts or higher temperatures will reduce this storage period.

To increase the initial rate of cure of **SYNOCURE 867 S 57** paints, at both ambient temperatures and under low bake conditions, the use of tin or zinc catalysts in the form of dibutyl tin dilaurate or zinc octate is recommended. The levels used will depend on specific requirements, but typical metal contents calculated on total solid resin would be 0.001% tin and 0.0015% zinc.

SOLUBILITY

The solvents chosen for paints and lacquers based on **SYNOCURE 867 S 57** should be free of water and should not contain groups that react with isocyanates. Esters and ketones are true solvents for this type of system and are usually used with aromatic hydrocarbon diluents.

Notes: ¹⁾Bayer ²⁾Perstorp

Precautions for Use

Please refer to corresponding Safety Data Sheet.

Storage Recommendations

SYNOCURE 867 S 57 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.



The world is our inspiration

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