

SYNOCURE® 9291 BA 75

PROTECTIVE & MARINE COATINGS / VEHICLE REFINISHING

ARKEMA COATING RESINS

Product Application details

SYNOCURE® 9291 BA 75 is a high solid hydroxy functional acrylic resin designed to crosslink at room temperature with polyisocyanates.

SYNOCURE® 9291 BA 75 is particularly well suited for use in high quality industrial coatings top coat and clear coat.

SYNOCURE® 9291 BA 75 has good resistance properties to solvents and chemicals and to exposure to weather and UV light, making it suitable for high quality anti-corrosive protection and for long life heavy duty coating.

Performance Benefits

- VOC compliant
- Good durability
- High hardness and toughness
- Quick drying
- Scratch resistance: mar and car wash resistance

Polymer Type

- Solventborne Acrylic

Sales Specifications

Solid Content at 125°C, % (ISO 3251)	74 - 76
Viscosity at 25°C, mPa.s (ISO 3219)	4000 - 7500
Colour, Hazen scale (ISO 6271)	50 max
Acid value, mg KOH/g (ISO 2114)	9 - 13

Other Characteristics¹

Volatile	Butyl acetate
Flash point, °C (ISO 3679)	23
Density / Specific Gravity at 20°C, g/ml (ISO 2811)	1.05
Hydroxyl Content, %	4.1
Hydroxyl Equivalent weight	416

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

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

Formulation Guidelines

RECOMMENDATIONS FOR USE

SYNOCURE® 9291 BA 75 should be mixed with the selected polyisocyanate just prior to application. 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:

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

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

Using Tolonate™ HDB 75 series (1), the recommended ratios would be:

	on solid resin	as supplied
SYNOCURE® 9291 BA 75	416	555
Tolonate™ HDB 75 series (1)	191	255

SYNOCURE® 9291 BA 75 reacted with Tolonate™ HDB 75 series (1) or

SYNOCURE®

Desmodur® N 75 series (2) in stoichiometric proportions has a usable pot life in excess of a full working day 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® 9291 BA 75 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 octoate 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® 9291 BA 75 should be free of water and should not contain groups which react with isocyanates. Esters and ketones are true solvents for this type of system and are usually used with aromatic hydrocarbon diluents.

Notes: (1) Vencorex Chemicals, (2) Bayer MaterialScience

Product Safety

Please refer to the corresponding Safety Data Sheet.

Storage & Handling

SYNOCURE® 9291 BA 75 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 12 months from the shipping date

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