SYNOCURE®

TECHNICAL DATA SHEET

# SYNOCURE® 867 BA 60

*Acrylic polyol*

## PRODUCT APPLICATION DETAILS

SYNOCURE® 867 BA 60 is a hydroxy functional acrylic designed to crosslink at room temperature with polyisocyanates.
SYNOCURE® 867 BA 60 is especially recommended for coatings where outdoor durability and resistant properties are of prime importance.

## SALES SPECIFICATIONS

| | CHARACTERISTICS | METHODS |
|---|---|---|
| Solid content (125°C) | 58 - 62 % | ISO 3251 |
| Viscosity (25°C) | 3500 - 6000 mPa.s | ISO 12058-1 |
| Color | 70 max Pt/Co | ISO 6271 |
| Acid value | 8 max mg KOH/g | ISO 2114 |

## OTHER CHARACTERISTICS[1]

| | CHARACTERISTICS | METHODS |
|---|---|---|
| Solvent | Butyl acetate | - |
| Flash point | 24 °C | ISO 3679 |
| Density | 1.02 g/ml | ISO 2811 |
| Hydroxyl content | 2.8 % | - |
| Hydroxyl equivalent weight | 600 | - |

[1] The 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 - OEM
  - Automotive - Refinish
  - General Industry
  - Protective And Marine Coating

## PERFORMANCE BENEFITS

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

# SYNOCURE® 867 BA 60

## FORMULATION GUIDELINES

**RECOMMENDATIONS FOR USE**

SYNOCURE® 867 BA 60 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*100) / %OH
Isocyanate Equivalent Weight = (42*100) / %NCO
Using Desmodur® N 75 series [1] or Tolonate™ HDB 75 MX [2], the recommended ratios would be:
- on solid resins: SYNOCURE® 867 BA 60/Desmodur® N 75 series [1] or Tolonate™ HDB 75 MX [2] = 600/191
- as supplied: SYNOCURE® 867 BA 60/Desmodur® N 75 series [1] or Tolonate™ HDB 75 MX [2] = 1000/255

When mixed with polyisocyanates in stoichiometric proportions, SYNOCURE® 867 BA 60 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® 867 BA 60 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® 867 BA 60 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] Bayer MaterialScience, [2] Vencorex Chemicals

## PRODUCT SAFETY

Please refer to the corresponding Safety Data Sheet.

## STORAGE AND HANDLING

SYNOCURE® 867 BA 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 shipping date.
Shelf Life (Months): 12



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