

## TECHNICAL DATA SHEET

# SYNOLAC® 153S-60

*Oil free polyester*

### PRODUCT APPLICATION DETAILS

SYNOLAC® 153S-60 is a high quality, extremely flexible linear oil free polyester resin developed for use in DWI can coating, collapsible tube, sheet fed metal decorating and coil coating applications.

### SALES SPECIFICATIONS

	CHARACTERISTICS	METHODS
Solid content (at 150°C, 1gm, 1hr)	58 - 62 %	ISO 3251
Viscosity (at 25°C)	100 - 140 P	
Color	3 max Gardner	ISO 4630
Acid value	10 max mg KOH/g	ISO 2114
Hydroxyl value	15 - 25	

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

	CHARACTERISTICS	METHODS
Volatile	Aromatic Solvent 150	
Density (at 20°C)	1.1 g/ml	ISO 2811

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

#### Coatings & Inks

- Industrial Coating

### PERFORMANCE BENEFITS

- Excellent forming properties
- Excellent flexibility
- Good gloss and good flow
- Good adhesion
- Good UV ink adhesion
- Good exterior durability

# SYNOLAC® 153S-60

## FORMULATION GUIDELINES

SYNOLAC® 153S-60 is compatible with a wide range of melamine resins and is typically used with hexamethoxymethyl melamine resin and partially methylated melamine. For an optimum performance with respect to level of cure, flexibility, hardness, and impact resistance, a combination of SYNOLAC® 153S-60 with hexamethoxymethyl melamine resin at ratio of 70:30 to 85:15 on solid resin content is suggested.

To promote cure the use of between 1 - 5% of acid catalyst is recommended, e.g. paratoluene sulphonic acid calculated on melamine solids.

Variation in the levels of SYNOLAC® 153S-60 and the type of amino resin will modify the overall performance characteristics of the coating. Increasing the level of amino resin and catalyst will generally tend to increase the hardness and solvent resistance of the coating but may compromise flexibility. For metal decorating formulations, a recommended blend on solids of 72:18:10 i.e. OFPR: MF: EPOXY resin (500eq. wt.) with 2% pTSA solids amino is suitable.

For coil coating applications 85:15 to 80:20 ratio, on solids with hexamethoxymethyl melamine resin is recommended with 2% pTSA catalyst on amino resin level.

Part methylated amino resin can be used in place of hexamethoxymethyl melamine and will develop very good resistance but at the expense of flexibility. Benzoguanamine resin can also be used to increase cure response and retortability.

## PRODUCT SAFETY

Please refer to the corresponding Safety Data Sheet.

## STORAGE AND HANDLING

SYNOLAC® 153S-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 date of manufacturing.

Shelf Life (Months): 12

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