SYNOLAC® 227 S 65

Product Application details

SYNOLAC® 227 S 65 is an oil free, saturated, hydroxy functional polyester resin for polyurethane and stoving systems.
SYNOLAC® 227 S 65 provides, in stoving systems, with the appropriate melamine resins very good reactivity and yellowing resistance. Stoved films achieve very high gloss and excellent exterior durability. Even under overbake conditions these good properties are not affected significantly.
Two-pack systems based on SYNOLAC® 227 S 65 show very good adhesion, tough flexibility and good exterior durability.
SYNOLAC® 227 S 65 is particularly recommended for use in coatings for household appliances.
SYNOLAC® 227 S 65 is also recommended in combination with polyisocyanates in 2-pack primers and topcoats for metal and wood.

Polymer Type

- Solventborne Polyester

Sales Specifications

Solid Content at 125°C, % (ISO 3251)	64 - 66
Viscosity at 23°C, mPa.s (ISO 12058-1)	6000 - 8500
Iodine Colour index, (50% % in solvent mixture) (DIN EN 1557)	5 max
Acid value, mg KOH/g (ISO 2114)	10 max

Other Characteristics[1]

Volatile	2:1 Aromatic hydrocarbon, boiling range 160°C - 180°C : Xylene
Flash point, °C (ISO 3679)	32
Density / Specific Gravity at 20°C, g/ml (ISO 2811)	1.02
Hydroxyl Content, %	3.6

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

SYNOLAC® 227 S 65 is compatible with all commonly used polyisocyanate resins and a wide variety of melamine formaldehyde resins.
In combination with HMMM-resins acid catalysts like Nacure® 155 (1) can be used to get good film properties already at relatively low stoving temperature.
The curing with aliphatic polyisocyanates, especially, can be accelerated by suitable catalysts like DBTDL, DEEA. The shortened pot life should be taken in account.

SOLUBILITY

SYNOLAC® 227 S 65 is completely soluble in aromatic hydrocarbons, esters, glycol ethers, glycol ether esters, and ketones. It is partially soluble in alcohols and insoluble in aliphatic hydrocarbons.

COMPATIBILITY

SYNOLAC® 227 S 65 is compatible with many short oil alkyd resins, ketone resins, epoxy resins. It is incompatible with medium and long oil alkyds, epoxy esters and acrylic resins.

OTHER ADDITIVES

SYNOLAC® 227 S 65 provides a very good pigment wetting of most of the common titanium dioxides and other inorganic and organic pigments. In case of difficult to disperse pigments the wetting can be improved by using polymer dispersing agents like Disperbyk® 161 (2) or Efka® 4046 (3).

Notes: (1) King Industries, (2) Byk, (3) BASF

Product Safety	Please refer to the corresponding Safety Data Sheet.
Storage & Handling	SYNOLAC® 227 S 65 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 6 months from the shipping date

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