

COATING RESINS

TECHNICAL DATA

SYNOLAC 680 X 60

SALES SPECIFICATION

Non-volatile content, % (ISO 3251, 1g, 1h, 125°C)	59 - 61
Viscosity at 20°C, s (DIN 53 211, 4mm, 50% in Xylene)	120 - 150
Colour, Iodine Colour Value (DIN EN 1557)	max. 5
Acid value ¹⁾ , mg KOH/g (ISO 3682)	max. 15

OTHER PROPERTIES

Volatile	Xylene
Flash point, °C (ISO 3679)	approx. 26 (typical)
Density at 20°C, g/cm ³ (ISO 2811)	approx. 1.04
Hydroxyl content, %	approx. 3.3

¹⁾ quoted relative to solid resin

PRODUCT INFORMATION

SYNOLAC 680 X 60 is a branched, hydroxy functional polyester resin designed to crosslink with polyisocyanates under ambient or force dry conditions. **SYNOLAC 680 X 60** exhibits a very fast drying and a high level of hardness of the cured films. The resulting surfaces are highly abrasion resistant and non-thermoplastic. Finishes based on **SYNOLAC 680 X 60** show an excellent light- and weather resistance, making it suitable for high quality coatings for objects with long life cycles.

The cure response of **SYNOLAC 680 X 60**, particularly with aliphatic polyisocyanates, may be accelerated using suitable catalysts, like DBTL, zinc-octoate or DEEA. The reduction of the length of pot-life has to be taken into consideration.

SYNOLAC 680 X 60 shows a good acceptance of all commonly used pigments, anti corrosive pigments and extenders.

Notes: ¹⁾ Union Carbide ²⁾ Rhodia ³⁾ Bayer

RECOMMENDATIONS FOR USE

SYNOLAC 680 X 60 in combination with aliphatic polyisocyanates is particularly recommended for air- and warm air drying transport finishing systems. In combination with aromatic/aliphatic polyisocyanates **SYNOLAC 680 X 60** also finds application in fast drying coatings for wood, plastic substrates and paper.

SYNOLAC 680 X 60 may be thinned in all commonly used solvents for polyurethane systems, like ethyl acetate, butyl acetate, methoxypropyl acetate, xylene, MEK, MIBK etc.

SYNOLAC 680 X 60 is compatible with nitrocellulose, some polyvinylchloride copolymers, like Ucar Solution Vinyl VAGH¹⁾, ketone- and aldehyde resins and many acrylic resins from the SYNOCURE range. **SYNOLAC 680 X 60** is incompatible with cellulose acetate butyrate.

In general industrial and transport finishing systems **SYNOLAC 680 X 60** should preferably be combined with aliphatic polyisocyanates, like Tolonate HDB 75 MX or Tolonate HDT²⁾. **SYNOLAC 680 X 60** may also be formulated in combination with aromatic polyisocyanates, like Desmodur L or HL³⁾, to produce fast drying coatings for wood, paper or plastic substrates.

PRECAUTIONS FOR USE

Please refer to the corresponding Safety Data Sheet.

STORAGE

SYNOLAC 680 X 60 should be stored in the original containers in a dry place at temperatures between 5°C and 30°C. Avoid exposure to direct sunlight or frost. Under these conditions the product may be stored for up to 12 months.

