

## Synthopan 781-60

---

**Characteristics:**

Unsaturated polyester resin based on orthophthalic acid and standard glycols with very high reactivity and good heat resistance. The composition of Synthopan 781-60 corresponds to group 1 under DIN 18820 Part 1 and DIN type 1130 under DIN 16946 Part 2.

**Use:**

Synthopan 781-60 is particularly well suited to making SMCs and BMCs. When combined with suitable LS components, well suited to making pressed compositions with reduced shrinkage.

**Properties of the liquid resin:**

Property	Range	Unit	Test method
Acid value	19 -23	mg KOH/g	AV-F-S001
Non volatile content	64 - 68	%	AV-F-F003
Viscosity, 23 °C	1400 - 1500	mPas	AV-F-V005
Density	1.1	g/cm <sup>3</sup>	AV-F-D001
Colour value	max. 3	Iodine	AV-F-F008
Refractive index, 20 °C	1.523 - 1.526	-	AV-F-B001
Gel time; 65 °C - 150 °C	12 - 24	s	AV-F-T001
Cure Time; 65 °C - Tmax	70 - 90	s	AV-F-T001
Peak temperature	min. 190 °C	°C	AV-F-T001
MgO-thickening	10 - 14	10 <sup>6</sup> mPas	AV-F-M001
Water content	max. 0.09	%	AV-F-W001
Flash point	34	°C	AV-F-F006
Storage stability, 20 °C	6	months	-

**Remarks:**

Reactivity determined with: 2 g benzoyl peroxide (50 %) added to 100 g resin

**Properties of the cured resin (typical values):**

Property	Range	Unit	Test method
Flexural strength	120	N/mm <sup>2</sup>	AV-F-M007
Modulus of elasticity in bending	3700	N/mm <sup>2</sup>	AV-F-M007
Outer fibre strain	3.5	%	AV-F-M007
Tensile Strength	45	N/mm <sup>2</sup>	AV-F-M008
Modulus of elasticity in tension	3000	N/mm <sup>2</sup>	AV-F-M008
Elongation at break	1.5	%	AV-F-M008
Heat deflection temperature (HDT)	130	°C	AV-F-M009
Barcol hardness	45	-	AV-F-M010

**Transport and storage:**

Transport should be carried out in conditions protected from direct action by heat or moisture. Store in a cool place below 25 °C and away from moisture and direct sunlight.

This product information is the latest available, and is based on experience and observation. No liability is accepted for individual cases, since the conditions under which processing and application are carried out are outside our control. We guarantee a consistently high level of quality supported by our certified Quality Management System. When handling Synthopan® UP resins, observe the instructions in the safety data sheet.