



NORYL™ Resin SA90

Americas: COMMERCIAL

NORYL SA90 resin is a modified low molecular weight resin with increased hydroxyl functionality. It is designed specifically for use as a reactive component in epoxy and cyanate ester thermosets in electronic, coatings, adhesives, and composites applications. It has outstanding solubility in toluene & methyl ethyl ketone (MEK) and a low solution viscosity. Targeted application areas are in enhancing the performance (e.g. thermal, dielectric, mechanical, flame retardancy, and moisture uptake properties) of epoxy resins used in electronic packaging which include PCB laminates, copper clad laminates, epoxy prepregs, and protective coatings as well as various other composites applications.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
Tg (half width)	140	°C	SABIC Method
PHYSICAL			
Specific Gravity	1.02	-	ASTM D 792
Physical Form	PELLET	-	SABIC Method
Intrinsic Viscosity	0.09	dl/g	SABIC Method
Phenolic End-group Content	21500	ppm	SABIC Method
Hydroxy Equivalent Weight (HEW)	840	g/mol	SABIC Method
Solubility, Toluene (21°C)	50	wt%	SABIC Method
Solubility, Methyl Ethyl Ketone (21°C)	50	wt%	SABIC Method
Mn	1600	-	SABIC Method
Viscosity, 50 wt% in toluene, 25°C	298	cP	SABIC Method
Viscosity, 50 wt% in methyl ethyl ketone, 25°C	160	cP	SABIC Method
ELECTRICAL			
Dielectric Constant, 1 MHz	2.54	-	ASTM D 150
Dissipation Factor, 1 MHz	0.0007	-	ASTM D 150

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.
 (3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
 (4) Internal measurements according to UL standards.
 (5) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.
 (6) Needs hard coat to consistently pass 60 sec Vertical Burn.

Source GMD, last updated:

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