

SA90

DESCRIPTION

NORYL™ SA90 resin is a low molecular weight bi-functional oligomer with increased hydroxyl functionality based on polyphenylene ether (PPE). It has the potential to be used as a reactive component in epoxy and cyanate ester thermosets in electronics, coatings, adhesives, and composites applications. It has outstanding solubility in toluene & methyl ethyl ketone (MEK) and a low solution viscosity. Potential application areas include 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. NORYL SA90 resin can also be blended with thermoplastic elastomers and cured elastomers, which may support the enhancement of certain properties.

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
THERMAL			
Tg (half width)	140	°C	SABIC method
PHYSICAL			
Specific Gravity	1.02	-	ASTM D792
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/eq	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 D150
Dissipation Factor, 1 MHz	0.0007	-	ASTM D150

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