

# SA9000

## DESCRIPTION

NORYL™ SA9000 resin is a modified, low molecular weight, bi-functional oligomer based on polyphenylene ether (PPE) with vinyl end-groups. It is well suited for use with other unsaturated monomers and resins which cure via free radical reactions. These include styrenic, allylic, acrylic, maleimide, methacrylic, and unsaturated polyesters monomers and resins. It has a low solution viscosity and outstanding solubility in toluene & methyl ethyl ketone (MEK). Key application areas are in electronic packaging which include PCB laminates, copper clad laminates, non-epoxy prepregs, and adhesives. The use of NORYL SA9000 is especially advantageous in insulating materials where very low dielectric properties and decreased moisture absorption are required.

## TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>THERMAL</b>			
Tg (half width)	160	°C	SABIC method
<b>PHYSICAL</b>			
Specific Gravity	1.02	-	ASTM D792
Physical Form	POWDER	-	SABIC method
Intrinsic Viscosity	0.09	dl/g	SABIC method
Phenolic End-group Content	- 300	ppm	SABIC method
Vinyl Functionality	1.9	-	SABIC method
Solubility, Toluene (21°C)	50	Wt. %	SABIC method
Solubility, Methyl Ethyl Ketone (21°C)	50	Wt. %	SABIC method
Mn	2300	-	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
<b>ELECTRICAL</b>			
Dielectric Constant, 1 MHz	2.54	-	ASTM D150
Dissipation Factor, 1 MHz	0.0007	-	ASTM D150

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