UNINOR® PPO Modified

Polyphenylene Ether + PS

Nytef Plastics, Ltd.

Message:

UNINOR PPO (blend of polyphenylene oxide and styrene) is an amorphous thermoplastic that offers a superior blend of physical strength, flame resistance, and outstanding electrical properties. Unlike many amorphous materials that tend to steadily lose strength as temperatures increase, UNINOR PPO maintains its high stiffness to temperatures in excess of 200°F. In addition, it's low moisture absorption and low coefficient of thermal expansion contribute to it being one of the most dimensionally stable materials available. UNINOR PPO has an excellent V-0 UL-94 flame rating at thicknesses of 0.24" and over.

For applications that require improved strength and stiffness, 30% glass fiber filled UNINOR Rg-30 is available. Nytef Plastics' UNINOR PPO stock shapes machine easily and are available in a full range of heavy gauge rod, plate and tubular bar sizes.

PRODUCT ATTRIBUTES 230°F continuous use temperature Excellent strength and rigidity, even at elevated temperatures Low moisture absorption Superior electrical properties Rated UL V-0 (0.240") Easily machined and fabricated Glass fiber filled grades for improved strength and stiffness **INDUSTRIES** Automotive Aircraft and aerospace Appliance manufacturing Electrical and electronics manufacturing Microwave communications APPLICATIONS Manifolds **Electrical insulators** Electrical connectors and components Aircraft instrumentation **Business equipment housings**

General Information	
Features	Amorphous
	Flame Retardant
	Good Dimensional Stability
	Good Electrical Properties
	High Rigidity
	High Stiffness
	High Strength
	Low Moisture Absorption
	Machinable
Uses	Aerospace Applications
	Aircraft Applications
	Aircraft Interiors
	Appliances
	Automotive Applications
	Bushings

Connectors

Electrical Parts

Electrical/Electronic Applications

Housings

Appearance	Black		
Forms	Preformed Parts		
	Rod		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.08	g/cm³	ASTM D792
Water Absorption (24 hr)	0.070	%	ASTM D570
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	119		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2550	MPa	ASTM D638
Tensile Strength (Yield)	63.4	MPa	ASTM D638
Tensile Elongation (Break)	25	%	ASTM D638
Flexural Modulus	2550	MPa	ASTM D790
Flexural Strength	99.3	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	190	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8			
MPa, Unannealed)	123	°C	ASTM D648
Continuous Use Temperature	110	°C	UL 746
Peak Melting Temperature	254	°C	ASTM D3418
CLTE - Flow	5.9E-5	cm/cm/°C	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	> 1.0E+15	ohms·cm	ASTM D257
Dielectric Strength ¹	20	kV/mm	ASTM D149
Dielectric Constant (60 Hz)	2.70		ASTM D150
Dissipation Factor (60 Hz)	7.0E-4		ASTM D150
Flammability	Nominal Value	Unit	Test Method
Flame Rating (6.10 mm)	V-0		UL 94
NOTE			

1.

Method A (Short-Time)

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

