

### Typical Applications

- Medical devices
- Manifolds
- Pumps & valves
- Electrical components
- Fluid handling applications
- Housings

### Product Description

Noryl PPO (modified polyphenylene oxide) is manufactured from Noryl® resin. A combination of low moisture absorption and low thermal expansion make the material one of the most dimensionally stable thermoplastics available today.

Noryl PPO is used widely in products such as structural components and electrical housings due to the materials excellent insulating characteristics over a wide range of temperatures in service. The thermoplastic is also used in fluid handling applications as it has low moisture absorption.

### Key features

- High dielectric strength
- Low moisture absorption
- Excellent impact strength
- Thermal stability
- Long term dimensional stability
- Continuous use in temperature above 220 °F
- Hydrolytic stability
- Good impact resistance

### Availability

Rods, plates and tubes

### Usability

Noryl PPO is easy to fabricate, paint, and glue

### Mechanical Properties

	Units	ASTM Test	EN-265	30% GF
Flexural Modulus	psi	D790	370,000	1,130,000
Flexural Strength @yield	psi	D790	14,400	25,000
Hardness-Rockwell	—	D785	R119	L108
Izod Impact Strength				
Notched @-40°F	ft•lbs/in	D256	2.5	1.8
Notched @73°F	ft•lbs/in	D256	3.5	2.2
Tensile Elongation @break	%	D638	25.0	5.0
Tensile Strength @yield	psi	D638	9,200	17,500

### Thermal Properties

	in/in/°F			
Coefficient of Thermal Expansion	in/in/°F	D696	3.3x10 <sup>-5</sup>	1.4x10 <sup>-5</sup>
Flammability Rating-UL94				
@.058"	—	—	V-1	V-1
@.240"	—	—	V-0	V-0
Heat Deflection Temperature				
@66psi	°F	D648	—	285
@264psi	°F	D648	254	275

### Technical Assistance

Our knowledgeable staff backed up by our resident team of qualified metallurgists and engineers, will be pleased to assist further on any technical topic.

#### UK Service Centres:

Smiths Belfast **02895 908 897**  
 Smiths Biggleswade **01767 604 704**  
 Smiths Birmingham **0121 728 4940**  
 Smiths Bristol **0117 971 2800**  
 Smiths Chelmsford **01245 466 664**  
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#### Quality & Testing:



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