



QUADRANT

PROTEUS® O&P GRADE

For General Purpose Applications in Wet an Dry Environments Where Ease of Fabrication is Important

Product Profile:

- Thermoforming performance
- Used for orthotic & prosthetic applications
- Rigid form of polypropylene used where high stiffness is required
- Typical Flexural Modulus: 195,000 PSI
- Lot-to-lot consistency and formability
- Chemical- and corrosion-resistant
- No moisture absorption

Because people come in all different shapes and sizes, orthotic and prosthetic devices must be custom fit — and that's where Proteus® O&P Grade comes in. Proteus® O&P Grade maintains the rigidity and durability required by the orthotics and prosthetics industry, while exhibiting top thermoforming performance.

Proteus® O&P Grade is a "natural" color and available in 48" x 96" sheets with gauge sizes ranging from 1/16" to 1/4".



Industries	Applications
Medical Thermoforming	Orthotic and prosthetic devices Thermoformed part

Dallas, Texas (Corporate Offices)
Houston, Texas
Brandon, Mississippi

phone 800-782-1836 / 214-239-3870
phone 800-282-4388 / 713-979-0660
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Data Sheet No: 10509
Revision: 00
Effective Date: 7/14/06
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DATA SHEET			
PROTEUS® O & P Grade Natural Homopolymer Polypropylene			
Property	Units	Test Method	Typical Average Values
Mechanical			
Specific Gravity, 73° F	-	ASTM D792	.91
Yield Point, 73° F	psi	ASTM D638	4800
Tensile Elongation (at yield), 73° F	%	ASTM D638	14
Tensile at Break, 73° F	psi	ASTM D638	4800
Tensile Elongation (at break), 73° F	%	ASTM D638	400
Tensile Modulus of Elasticity, 73° F	psi	ASTM D638	190000
Flexural Modulus of Elasticity, 73° F	psi	ASTM D790	195000
Izod Impact (notched), 73° F	ft.lb./in.	ASTM D256 Type "A"	1.2
Hardness, Durometer, Shore "D" Scale, 73° F	-	ASTM D2240	78
Thermal			
Heat Deflection Temperature 66 psi	°F	ASTM D648	210
Melting Point (crystalline) peak	°F	ASTM D3418	327
Continuous Service Temperature in Air (Max.)(1)	°F	-	180
Electrical			
Volume Resistivity	Ohm-cm	ASTM D257	>10 ¹⁵
Surface Resistivity	Ohm	ASTM D257	>10 ¹⁵
Flammability @ 3.1 mm (1/8 in.) (3)	-	UL94	HB
Miscellaneous			
Water Absorption	% by wt.	ASTM D570(2)	

- (1) Data represent Quadrant's estimated maximum long-term service temperature based on practical field experience.
- (2) Specimens: 1/8" thick x 2" diameter or square.
- (3) **Estimated rating based on available data.** The UL 94 Test is a laboratory test and does not relate to actual fire hazard. Contact Quadrant for specific UL "Yellow Card" recognition number.

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