

# PORON® Medical Firm Energy Absorbing

PROPERTY	TEST METHOD	VALUE	
<b>PHYSICAL</b>			
Formulation		PORON MF, Energy Absorbing	
Standard Colors (Code)		Panel Tan (41), Navy (11)	
Density, kg/m <sup>3</sup> (lb./ft <sup>3</sup> )	ASTM D 3574-95 Test A	240 (15)	272 (17)
Specific Gravity		0.24	0.27
Tolerance, %		± 10	
Standard Thickness		See Product Availability	
Tolerance, %		± 10	
Standard Width, mm (inches)		1327 (54)	
Air Permeability	Gurley Densometer	Open-Cell - Breathable	
Compression Force Deflection, kPa (psi)	0.51 cm/min (0.2"/min) Strain Rate Force measured @ 25% deflection	41 - 111 (6 - 16)	55 - 138 (8 - 20)
Compression Set, % max	ASTM D 3574 Test D 70°C (158°F)	10	
Hardness Durometer, Shore O		18	20
Tensile Strength, kPa (psi), min	ASTM D 3574 Test E	483 (70)	621 (90)
Elongation, %, min	ASTM D 3574 Test E	100	
Tear Strength, kNm (pli), min	ASTM D 624 Die C	1.1 (6)	1.8 (10)
Temperature Resistance, max			
Recommended Constant Use	ASTM D 746-98	90°C (194°F)	
Recommended Intermittent Use		121°C (250°F)	

**PORON® MEDICAL FIRM-ENERGY ABSORBING, cont'd**

PROPERTY	TEST METHOD	VALUE
Hydrolysis Resistance, Compression Set, % max	ASTM D 3574 Test J / Test D after autoclaved 5 hrs @ 121°C (250°F)	Good Resistance 5
Resilience, Shore Instrument Resiliometer, avg (Ball Rebound Tester)	ASTM D 2632-96, Vertical Rebound	14                      15
Water Vapor Transfer, Typical g/m <sup>2</sup> /24 hrs (g/ft <sup>2</sup> /24 hrs)	Based on ASTM E 96-00	200 (> 19)
Water Absorption, Typical % Weight Gain	Based on ASTM D 570	< 20
Antimicrobial, Fungal Resistance	ASTM G 21	Does not promote fungal growth
Skin Contact, Primary Skin Irritation	ISO10993-10, 2010	Pass

Chemical Resistance: PORON® Polyurethanes are unaffected by mild organic acids and bases. They show modest swelling with oils and greases and other linear hydrocarbons. Strongly polar solvents will greatly swell PORON Polyurethanes. In most cases, physical properties recover to a great extent as the solvents evaporate.

Notes:

- All metric conversions are approximate.
- Additional technical information and product specifications are available upon request.
- Typical values should not be used for specification limits.