

PORON® Medical Firm Energy Absorbing

PROPERTY	TEST METHOD	VA	LUE	
PHYSICAL				
Formulation		PORON MF, Energy Absorbing		
Standard Colors (Code)		Panel Tan (41), Navy (11)		
Density, kg/m³ (lb./ft³)	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	VAL	UE
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/m²/24 hrs (g/ft²/24 hrs)	Based on ASTM E 96-00	200 (> 19)	
Water Absorption, Typical % Weight Gair	Based on ASTM D 570	< 20	
Antimicrobial, Fungal Resistance	ASTM G 21	Does not promot	e 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.

