

# **PORON® Plus Cushioning** The right amount of softness with added resilency.

PORON<sup>®</sup> Plus Cushioning gives you consistent, long-lasting cushioning comfort in a material that feels just right from the first use through the life of your product. A lightweight, flexible material that provides the perfect amount of softness with added energy return to help cushion joints and soft tissue, PORON Plus Cushioning delivers the very best in performance cushioning.

PORON Plus Cushioning is an ideal material for a wide variety of applications such as insoles, sockliners, ankle pads, collars, bag strap padding, gloves and many others. Now comfort doesn't have to mean two inches of foam padding. With PORON Plus Cushioning you get great comfort and performance in a material that will enhance your designs. Available in a variety of material combinations, PORON Plus technology is the superior choice to other traditional cushioning materials.

#### Soft and Resilient

- Offers the right amount of energy return to help reduce stress on joints and soft tissues of the body.
  - Essential for all-day comfort
  - Testing shows 30% rebound from original drop height
- Softer than most standard PORON Material offerings.

#### Maintains Performance

- Long-term comfort and performance for the life of your product.
- Excellent compression-set resistance that will not break down with repeated use.
- Open-cell, breathable technology.
- Standard offering of PORON Plus with Microban<sup>®</sup> Antimicrobial Protection.

### Versatile to Suit Your Designs

- Available in a variety of standard densities, thicknesses (2.0mm to 12.7mm) and color options.
- As part of a PORON Dual Layer package for a custom design.



#### ALL-DAY CUSHIONING COMFORT PERFECT AMOUNT OF SOFTNESS WITH ADDED ENERGY RETURN APPLICATIONS: INSOLES, SOCKLINERS, ANKLE PADS, BAG STRAP PADDING, GLOVES, ETC.



SOFT AND RESILIENT FOR ADDED COMFORT

Additional PORON Plus variations may be available upon special order. Rogers recommends textile or leather covering for additional comfort and wear strength. Please contact your Rogers Customer Service Representative for more details.

## **PORON<sup>®</sup> Plus Cushioning - Typical Physical Properties**

PROPERTY	TEST METHOD	PRODUCT	
FORMULATION		PORON Plus Cushioning (S-Soft)	
*DENSITY, lb. / ft3		15	20
Specific Gravity	ASTM D3574-95 Test A	0.24	0.32
Tolerance, %	± 10		10
*STANDARD THICKNESS		See Product Availability	
Tolerance, %		± 10	
STANDARD COLOR		Butterscotch (00), Black (04), Scarlet (69), Green (23)	
AIR PERMEABILITY	Gurley Densometer	Open Cell - Breathable	
CUSHION FACTOR, Grade Thickness	SATRA TM159:1992	A (4mm)	-
*COMPRESSION SET, % max.	ASTM D3574 Test D @ 158°F (70°C)	10	
*COMPRESSION FORCE DEFLECTION, psi	0.2"/min. Strain Rate Force Measured @ 25% Deflection	4 - 8	6 – 14
kPa		27–55	41-97
HARDNESS, Durometer	Shore "O"	12	17
HYDROLYSIS RESISTANCE Compression Set, % Max	ASTM D3574 Test J / Test D after autoclaved 5 hrs @ 250°F (121°C)	Good Resistance 5	
<b>RESILIENCE</b> , Shore Instrument Resiliometer, avg (Ball Rebound Tester)	ASTM D 2632-96, Vertical Rebound	24	25
WATER VAPOR TRANSFER, Typical g/ft2/24hrs (g/m2/24hrs)	Based on ASTM E96-00	>19 (200)	
WATER ABSORPTION, % Wt Gain	Based on ASTM D570	< 20	
SKIN CONTACT	Primary Skin Irritation – FHSA	Pass	
TEAR STRENGTH, pli, min.	ASTM D624 Die C	3	5
kN/m		0.5	0.9
*TENSILE ELONGATION, % min.	ASTM D3574 Test E	100	
*TENSILE STRENGTH, psi, min.	ASTM D3574 Test E	40	75
kPa		276	517
TEMPERATURE RESISTANCE, max			
Recommended Constant Use	ASTM D746-98	90°C (194°F)	
Recommended Intermittent Use		121°C (250°F)	
STAINING	ASTM D925-88	No Stain	
CHEMICAL RESISTANCE		PORON Urethanes are unaffected by mild organic acids and bases. They show modest swelling with oils and greases and other linear hydrocarbons. Strong polar solvents will greatly swell PORON Urethanes. In most cases, physical properties recover to a great extent as the solvents evaporate.	
ADDITIONAL SOLVENT RESISTANCE	Soap and Water 50/50	No tackiness or surface deterioration	
ANTIMICROBIAL PROTECTION	ААТСС ТМ90	PASS	
	JIS Z 2801		
	AATCC TM30(iii)		

Notes: 1. All metric conversions are approximate. 2. Additional technical services are available. 3. Information listed based on typical physical properties. 4. \*Standard testing property; Certificate of Compliance available per lot.

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