

CONFOR™ M Foams

CONFOR M slow-recovery foams, offer a unique combination of physical characteristics, high energy absorption properties and temperature-softening behavior. Soft and flexible, they are suitable for highly diverse applications, from shock isolation in electronics equipment to padding and cushioning in medical devices.

CONFOR M foams exhibit unusually low compression set, highly damped properties and provide excellent energy absorption. They soften on contact with a warm surface—allowing uniform pressure distribution and firm, yet fluid, support. Because the open-celled foams are breathable, non-irritating in dermal contact, they are ideal for medical and body contact cushioning applications. *Cushioning*—CONFOR M foams can provide flexible protection in a variety of cushioning applications, from body contact padding to electronics packaging. *Shock absorption*—With their excellent energy absorption characteristics CONFOR M materials offer a range of impact protection and isolation for dynamic loads, while maintaining consistent static load performance. *Vibration isolation*—CONFOR M foams' unique combination of slow recovery and high energy absorption allows the materials to offer effective damping and vibration isolation.

TYPICAL PROPERTIES				
PROPERTY	CF-40M	CF-42M	CF-45M	CF-47M
Density Nominal kg/m³ (lb/ft³) ASTM D3574	96 (6.0)	96 (6.0)	96 (6.0)	96 (6.0)
Flammability UL 94	Listed HBF @ 3mm	Listed HBF @ 3mm	Listed HBF @ 3mm	Listed HBF @ 3mm
FMVSS-302	Meets	Meets	Meets	Meets
California Flame 117–2013	Passes	Passes	Passes	Passes
Ball Rebound (%) ASTM D3574	<1.0	<1.0	<1.0	<1.0
Thermal Conductivity—K Value ASTM C177 W/m•K (BTU in/hr ft ² F)	.040 (0.28)	.040 (0.28)	.040 (0.28)	.040 (0.28)
Compression Set (%) ASTM D3574 22 hr at 22C (72F) Compressed 50%	1.2	1.0	1.0	1.0
Indentation Force Deflection ASTM D3574 Test B1 (modified) 25% Deflection for 12" x 12" x 2" sample: 22C (72F) at 50% Relative Humidity N (lbf)	97 (22)	155 (35)	213 (48)	280 (63)
Tensile Strength kPa (psi) ASTM D3574 51 mm/min (20 in/min)	48 (7.0)	83 (12)	117 (17)	152 (22)
Tear Strength kN/m (lbf/in) ASTM D3574 51 cm/min (20 in/min) at 22C (72F)	0.29 (1.7)	0.47 (2.7)	0.64 (3.7)	0.82 (4.7)
Compression Load Deflection ASTM D3574 Test C *Modified				
10% kPa (psi)	1.4 (0.20)	2.1 (0.31)	3.1 (0.44)	3.9 (0.57)
20% kPa (psi)	1.8 (0.26)	2.8 (0.40)	4.2 (0.61)	5.6 (0.82)
30% kPa (psi)	2.0 (0.29)	3.0 (0.44)	4.5 (0.66)	5.9 (0.86)
40% kPa (psi)	2.3 (0.33)	3.4 (0.50)	5.0 (0.73)	6.5 (0.94)
50% kPa (psi)	2.9 (0.42)	4.1 (0.59)	5.9 (0.86)	7.6 (1.1)
60% kPa (psi)	3.5 (0.51)	5.4 (0.78)	7.7 (1.1)	9.8 (1.4)
70% kPa (psi)	6.0 (0.87)	8.8 (1.3)	12 (1.8)	16 (2.3)
80% kPa (psi)	16 (2.3)	23 (3.3)	32 (4.6)	40 (5.7)
RoHS Compliant	Yes	Yes	Yes	Yes

The data listed in this data sheet are typical or average values based on tests conducted by independent laboratories or by the manufacturer. They are indicative only of the results obtained in such tests and should not be considered as guaranteed maximums or minimums.

Materials must be tested under actual service to determine their suitability for a particular purpose.

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Material Summary Sheet 9



Offering solutions for a wide range of applications such as...

Positioning and support devices

Sports and medical padding

Electronic devices