## **CONFOR™** Foam Family



The standard CONFOR product line is being replaced with two updated versions. Both the new CONFOR M foam and the CONFOR AC foam have the same slow recovery attributes as our current standard foams. The CONFOR M and CONFOR AC foams are both RoHS Compliant. Additionally, the CONFOR AC foam meets CAL 117 and FAR 25.253 (a) requirements.

#### **CONFOR CF-40 Foam Series**

Typical Property	Test Method	CF-40M	CF-40AC	CF-40
Density Nominal kg/m <sup>3</sup> (lb/ft <sup>3</sup> )	ASTM D3574	96 (6.0)	96 (6.0)	96 (6.0)
Flammability	UL 94 (Minimum thickness stated) FMVSS-302 FAR 25.853(a) Appendix F Part I (a)(1)(ii)(12 sec) CAL 117 RoHS Compliant	Listed HBF @ 3mm Meets No No Yes	Meets HF-1 @ 3 mm Meets Meets Meets Yes	Listed HBF @ 6mm Meets Meets Meets No
Ball Rebound %	ASTM D3574	<1	1	<1
Thermal Conductivity K Value	ASTM C177 W/m*K (BTU in/hr ft <sup>2</sup> F)	.040 (0.28)	0.040 (0.28)	0.040 (0.28)
Compression Set (%) 22 hr @ 22C (72F) Compressed 50%	ASTM D3574	1.2	<1	<1
Indentation Force Deflection	ASTM D3574 Test B1 Modified 25% Deflection for 12"x12"x2" sample 22C (72F) @ 50% Relative Humidity N (lbf)	97 (22)	97 (22)	97 (22)
Tensile Strength kPa (psi)	ASTM D3574 5.1 mm/min (20 in/min)	48 (7.0)	51 (7.4)	55 (8)
Tear Strength kN/m (lbf/in)	ASTM D3574 51 cm/min (20 in/min) @ 22C (72F)	0.29 (1.7)	0.29 (1.7)	0.33 (1.9)
Compression Load Deflection Force @ 10% Compression kPa (psi) Force @ 20% Compression kPa (psi) Force @ 30% Compression kPa (psi) Force @ 40% Compression kPa (psi) Force @ 50% Compression kPa (psi) Force @ 70% Compression kPa (psi) Force @ 80% Compression kPa (psi)	ASTM D 3574C *Modified * 12.7mm thick specimen compressed at a rate of 5.1 mm/min	1.4 (0.20) 1.8 (0.26) 2.0 (0.29) 2.3 (0.33) 2.9 (0.42) 3.5 (0.51) 6.0 (0.87) 16 (2.3)	1.5 (0.21) 2.0 (0.28) 2.3 (0.33) 2.6 (0.38) 3.2 (0.47) 4.4 (0.63) 7.5 (1.1) 20 (2.9)	1.4 (0.20) 1.8 (0.26) 1.9 (0.28) 2.2 (0.32) 2.6 (0.37) 3.2 (0.47) 5.1 (0.74) 12 (1.8)

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## **CONFOR<sup>TM</sup>** Foam Family

#### Typical Property CF-42M CF-42AC **CF-42 Test Method** Density Nominal kg/m<sup>3</sup> (lb/ft<sup>3</sup>) ASTM D3574 96 (6.0) 96 (6.0) 96 (6.0) Flammability UL 94 (Minimum thickness stated) Listed HBF @ 3mm Meets HF-1 @ 3 mm Listed HBF @ 6mm FMVSS-302 Meets Meets Meets FAR 25.853(a) Appendix F Part I (a)(1)(ii)(12 sec) No Meets Meets CAL 117 No Meets Meets **RoHS** Compliant Yes Yes No Ball Rebound % ASTM D3574 <1 1.3 <1 ASTM C177 W/m\*K (BTU in/hr ft<sup>2</sup> F) .040 (0.28) 0.040 (0.28) 0.040 (0.28) Thermal Conductivity -- K Value ASTM D3574 Compression Set (%) 22 hr @ 22C (72F) Compressed 50% 1.0 < 1 < 1.0 Indentation Force Deflection ASTM D3574 Test B1 Modified 25% Deflection for 12"x12"x2" sample 22C (72F) @ 50% Relative Humidity N (lbf) 155 (35) 155 (35) 115 (35) Tensile Strength kPa (psi) ASTM D3574 5.1 mm/min (20 in/min) 83 (12) 83 (12) 97 (14) Tear Strength kN/m (lbf/in) ASTM D3574 51 cm/min (20 in/min) @ 22C (72F) 0.47 (2.7) 0.45 (2.6) 0.52 (3) Compression Load Deflection ASTM D 3574C \*Modified Force @ 10% Compression kPa (psi) 12.7mm thick specimen compressed at a rate of 2.1 (0.31) 2.2 (0.31) 2.3 (0.33) Force @ 20% Compression kPa (psi) 5.1 mm/min 2.8 (0.40) 2.9 (0.42) 3.0 (0.44) Force @ 30% Compression kPa (psi) 3.0 (0.44) 3.2 (0.47) 3.2 (0.47) Force @ 40% Compression kPa (psi) 3.4 (0.50) 3.6 (0.52) 3.7 (0.54) Force @ 50% Compression kPa (psi) 4.1 (0.59) 4.4 (0.64) 4.2 (0.61) Force @ 60% Compression kPa (psi) 5.4 (0.78) 5.9 (0.85) 5.4 (0.78) Force @ 70% Compression kPa (psi) 8.8 (1.3) 9.8 (1.4) 8.3 (1.2) Force @ 80% Compression kPa (psi) 23 (3.3) 25 (3.6) 20 (2.9)

#### **CONFOR CF-42 Foam Series**

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## **CONFOR<sup>TM</sup>** Foam Family

Typical Property	Test Method	CF-45M	CF-45AC	CF-45
Density Nominal kg/m <sup>3</sup> (lb/ft <sup>3</sup> )	ASTM D3574	96 (6.0)	96 (6.0)	96 (6.0)
Flammability	UL 94 (Minimum thickness stated)	Listed HBF @ 3mm	Meets HF-1 @ 3 mm	Listed HBF @ 6mm
	FMVSS-302	Meets	Meets	Meets
	FAR 25.853(a) Appendix F Part I (a)(1)(ii)(12 sec)	No	Meets	Meets
	CAL 117	No	Meets	Meets
	RoHS Compliant	Yes	Yes	No
Ball Rebound %	ASTM D3574	<1	1.9	<1
Thermal Conductivity K Value	ASTM C177 W/m*K (BTU in/hr ft <sup>2</sup> F)	.040 (0.28)	0.040 (0.28)	0.040 (0.28)
Compression Set (%)	ASTM D3574			
22 hr @ 22C (72F)				
Compressed 50%		< 1.0	< 1	< 1.0
Indentation Force Deflection	ASTM D3574 Test B1 Modified 25% Deflection for 12"x12"x2" sample 22C (72F) @ 50% Relative Humidity			
		213 (48)	213 (48)	214 (48)
Tensile Strength kPa (psi)	ASTM D3574 5.1 mm/min (20 in/min)	117 (17)	145 (21)	131 (19)
Tear Strength kN/m (lbf/in)	ASTM D3574 51 cm/min (20 in/min) @ 22C (72F)	0.64 (3.7)	0.73 (4.2)	0.70 (4)
Compression Load Deflection	ASTM D 3574C *Modified			
Force @ 10% Compression kPa (psi)	* 12.7mm thick specimen compressed at a rate of	3.1 (0.44)	3.9 (0.57)	3.2 (0.46)
Force @ 20% Compression kPa (psi)	5.1 mm/min	4.2 (0.61)	5.0 (0.72)	4.4 (0.64)
Force @ 30% Compression kPa (psi)		4.5 (0.66)	5.3 (0.76)	4.7 (0.68)
Force @ 40% Compression kPa (psi)		5.0 (0.73)	5.9 (0.85)	5.2 (0.75)
Force @ 50% Compression kPa (psi)		5.9 (0.86)	7.0 (1.0)	6.0 (0.87)
Force @ 60% Compression kPa (psi)		7.7 (1.1)	9.1 (1.3)	7.6 (1.1)
Force @ 70% Compression kPa (psi)		12 (1.8)	15 (2.1)	12 (1.7)
Force @ 80% Compression kPa (psi)		32 (4.6)	36 (5.3)	28 (4.1)

#### **CONFOR CF-45 Foam Series**

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Product

**Bulletin** 

# **CONFOR<sup>TM</sup>** Foam Family

### **CONFOR CF-47 Foam Series**

Typical Properties	Test Method	CF-47M	CF-47AC	CF-47
Density Nominal kg/m <sup>3</sup> (lb/ft <sup>3</sup> )	ASTM D3574	96 (6.0)	96 (6.0)	96 (6.0)
Flammability	UL 94 (Minimum thickness stated) FMVSS-302	Listed HBF @ 3mm Meets	Meets HF-1 @ 3 mm Meets	Listed HBF @ 6mm Meets
	FAR 25.853(a) Appendix F Part I (a)(1)(ii)(12 sec)	No	Meets	Meets
	CAL 117	No	Meets	Meets
	RoHS Compliant	Yes	Yes	No
Ball Rebound %	ASTM D3574	<1	2.2	<1
Thermal Conductivity K Value	ASTM C177 W/m*K (BTU in/hr ft <sup>2</sup> F)	.040 (0.28)	0.040 (0.28)	0.040 (0.28)
Compression Set (%)	ASTM D3574			
22 hr @ 22C (72F)				
Compressed 50%		< 1.0	< 1	< 1.0
Indentation Force Deflection	ASTM D3574 Test B1 Modified			
	25% Deflection for 12"x12"x2" sample			
	22C (72F) @ 50% Relative Humidity			
	N (lbf)	280 (63)	280 (63)	280 (63)
Tensile Strength kPa (psi)	ASTM D3574			
	5.1 mm/min (20 in/min)	152 (22)	193 (28)	172 (25)
Tear Strength kN/m (lbf/in)	ASTM D3574 51 cm/min (20 in/min)			
	@ 22C (72F)	0.82 (4.7)	0.98 (5.6)	0.91 (5.2)
Compression Load Deflection	ASTM D 3574C *Modified			
Force @ 10% Compression kPa (psi)	* 12.7mm thick specimen compressed at a rate of	3.9 (0.57)	4.8 (0.69)	5.3 (0.77)
Force @ 20% Compression kPa (psi)	5.1 mm/min	5.6 (0.82)	6.9 (1.0)	6.9 (1.0)
Force @ 30% Compression kPa (psi)		5.9 (0.86)	7.2 (1.0)	7.9 (1.1)
Force @ 40% Compression kPa (psi)		6.5 (0.94)	7.9 (1.1)	7.9 (1.1)
Force @ 50% Compression kPa (psi)		7.6 (1.1)	9.3 (1.3)	9.3 (1.3)
Force @ 60% Compression kPa (psi)		9.8 (1.4)	12 (1.7)	12 (1.7)
Force @ 70% Compression kPa (psi)		16 (2.3)	20 (2.8)	18 (2.6)
Force @ 80% Compression kPa (psi)		40 (5.7)	49 (7.1)	46 (6.6)

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