

ENGINEERED FOR PERFORMANCE

EnsoLite OER

Engineered solution that provides thermal insulation properties and protection from dust, debris, and moisture.

- // Soft firmness
- // Good resistance to oil and fuel
- // Superior flame performance
- // Continuous rolls provide great economies in fabrication

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TECHNICAL DATA - ENSOLITE OER

Min. °C Min. °F Max. °C (intermittent) Max. °F (intermittent)	Brief description	OER is an NBR/PVC, closed cell product produced in continous rolls. It is a soft, low density foam that meets ASTM D 1056 2C1 requirements. This product has excellent flame performance and is UL listed to UL94 flammability.				
Colosed Form	Product color range	Black				
Polymer	ASTM D 1056 Designation	2A1/2C1				
Polymer NBR/PVC Equipment Standard / Test method Foregrey Value / Assessment Standard / Test method Foregrey Value / Assessment Standard / Test method Foregrey Value / Assessment Value / Assess	Cell structure	Closed				
Property Value / Assessment Standard / Test method	Form	Roll				
Property Value Assessment Standard Test method Temperature range Min. °C Min. °F Max. °C (intermittent) Max. °F (intermittent	Polymer	NBR/PVC				
Min. °C Min. °F Max. °C (intermittent) Max. °F (intermittent) ASTM D1056	Markets	Equipment				
Min. °C Min. °F Max. °C (intermittent) Max. °F (intermittent) ASTM D1056	Property	Value / Assessment				Standard / Test method
Flammability Flam	Temperature range					
Flammability Flame FMVSS 302 (burn rate) 3.94 in/minute [1100 mm/minute] max Passes at 0.250 in [6.35 mm] and higher FMVSS 302 UL standards UL.94 SVA Passes at 6 mm [0.236 in] minimum thickness UL File # QMFZ2.E55798 & # QMFZ8.E55798 UL 94 UL.94 V-0 Passes at 6 mm [0.236 in] minimum thickness UL File # QMFZ2.E55798 & # QMFZ8.E55798 UL 94 Resistance to water Water absorption by vacuum 10% max ASTM D1056 Physical attributes Density 3 - 6 lb/ft³ 48.1 - 96.1 kg/m³ ASTM D1056 Mechanical properties Compression set 40% max ASTM D1056 Tensile strength 15 psi min 103 kPa min ASTM D412 (Die A) Elongation 100% min ASTM D412 (Die A) Fluid immersion 250% max ASTM D1056 Compression deflection Compression deflection 2 - 5 psi 13.8 - 34.5 kPa ASTM D1056	Service temperature	Min. °C	Min. °F	Max. °C (intermittent)	Max. °F (intermittent)	ASTM D1056
Flame FMVSS 302 (burn ratel) 3.94 in/minute 1100 mm/minute) max Passes at 0.250 in (6.35 mm) and higher FMVSS 302 UL standards UL.94 SVA Passes at 6 mm (0.236 in) minimum thickness UL.File # QMFZ2.E55798 & # QMFZ8.E55798 UL.94 UL.94 V-0 Passes at 6 mm (0.236 in) minimum thickness UL.File # QMFZ8.E55798 & # QMFZ8.E55798 UL.94 Resistance to water Water absorption by vacuum 10% max ASTM D1056 Physical attributes Density 3 - 6 tb/ft ³ / 48.1 - 96.1 kg/m ³ ASTM D1056 Mechanical properties Compression set 40% max ASTM D1056 Tensile strength 15 psi min 103 kPa min ASTM D412 (Die A) Elongation 100% min ASTM D1056 Compression deflection Compression deflection ASTM D1056 Compression deflection 2 - 5 psi 13.8 - 34.5 kPa ASTM D1056		-40	-40	93.3	200	
Passes at 0.250 in (6.35 mm) and higher UL standards UL 94 SVA Passes at 6 mm (0.236 in) minimum thickness UL File # 0MF22.E55798 & # 0MF28.E557998 UL 94 UL 94 V-0 Passes at 6 mm (0.236 in) minimum thickness UL File # 0MF22.E55798 & # 0MF28.E55798 UL 94 Resistance to water Water absorption by vacuum 10% max ASTM D1056 Physical attributes Density 3 - 6 lb/ft ³ 48.1 - 96.1 kg/m ³ ASTM D1056 Mechanical properties Compression set 40% max ASTM D1056 Tensile strength 15 psi min 103 kPa min ASTM D412 (Die A) Elongation 100% min ASTM D412 (Die A) Fluid immersion 250% max ASTM D1056 Compression deflection Compression deflection 2 - 5 psi 13.8 - 34.5 kPa ASTM D1056	Flammability					
UL 94 5VA Passes at 6 mm [0.236 in] minimum thickness UL File # QMFZ2.E55798 & # QMFZ8.E55798 UL 94 UL 94 V-0 Passes at 6 mm [0.236 in] minimum thickness UL File # QMFZ2.E55798 & # QMFZ8.E55798 UL 94 Resistance to water Water absorption by vacuum 10% max ASTM D1056 Physical attributes Density 3 - 6 lb/t1³ Ast. 1 - 96.1 kg/m³ ASTM D1056 Mechanical properties Compression set 40% max ASTM D1056 Tensile strength 15 psi min 103 kPa min 100% min ASTM D412 [Die A] Fluid immersion 250% max ASTM D1056 Compression deflection Compression deflection 25% 2 - 5 psi 1.3.8 - 34.5 kPa ASTM D1056	Flame FMVSS 302 (burn rate)					FMVSS 302
UL File # QMFZ2.E55798 & # QMFZ8.E55798 UL94 V-0 Passes at 6 mm (0.236 in) minimum thickness UL File # QMFZ2.E55798 & # QMFZ8.E55798 UL 94 Resistance to water Water absorption by vacuum 10% max ASTM D1056 Physical attributes Density 3 - 6 lb/ft³ 48.1 - 96.1 kg/m³ ASTM D1056 Mechanical properties Compression set 40% max ASTM D1056 Tensile strength 15 psi min 103 kPa min ASTM D412 [Die A] Elongation 100% min ASTM D412 [Die A] Fluid immersion 250% max ASTM D1056 Compression deflection Compression deflection 2 - 5 psi 13.8 - 34.5 kPa ASTM D1056	UL standards					
UL File # QMFZ2.E55798 & # QMFZ8.E55798 Resistance to water Water absorption by vacuum 10% max ASTM D1056 Physical attributes Density 3 - 6 lb/ft³ 48.1 - 96.1 kg/m³ ASTM D1056 Mechanical properties Compression set 40% max ASTM D1056 Tensile strength 15 psi min 103 kPa min ASTM D412 (Die A) Elongation 100% min ASTM D412 (Die A) Fluid immersion 250% max ASTM D1056 Compression deflection Compression deflection 2 - 5 psi 13.8 - 34.5 kPa ASTM D1056	UL94 5VA					UL 94
Water absorption by vacuum 10% max ASTM D1056 Physical attributes Density 3 - 6 lb/ft³ 48.1 - 96.1 kg/m³ ASTM D1056 Mechanical properties Compression set 40% max ASTM D1056 Tensile strength 15 psi min 103 kPa min ASTM D412 (Die A) Elongation 100% min ASTM D412 (Die A) Fluid immersion 250% max ASTM D1056 Compression deflection Compression deflection 2 - 5 psi 13.8 - 34.5 kPa ASTM D1056	UL94 V-0					UL 94
Physical attributes Density 3 - 6 lb/ft³ 48.1 - 96.1 kg/m³ ASTM D1056 Mechanical properties Compression set 40% max ASTM D1056 Tensile strength 15 psi min 103 kPa min ASTM D412 [Die A] Elongation 100% min ASTM D412 [Die A] Fluid immersion 250% max ASTM D1056 Compression deflection Compression deflection 2 - 5 psi 13.8 - 34.5 kPa ASTM D1056	Resistance to water					
Density 3 - 6 lb/ft³ 48.1 - 96.1 kg/m³ ASTM D1056 Mechanical properties Compression set 40% max ASTM D1056 Tensile strength 15 psi min 103 kPa min ASTM D412 (Die A) Elongation 100% min ASTM D412 (Die A) Fluid immersion 250% max ASTM D1056 Compression deflection 250% max ASTM D1056	Water absorption by vacuum	10% max				ASTM D1056
Mechanical properties Compression set 40% max ASTM D1056 Tensile strength 15 psi min 103 kPa min ASTM D412 (Die A) Elongation 100% min ASTM D412 (Die A) Fluid immersion 250% max ASTM D1056 Compression deflection ASTM D1056	Physical attributes					
Compression set40% maxASTM D1056Tensile strength15 psi min 103 kPa minASTM D412 [Die A]Elongation100% minASTM D412 [Die A]Fluid immersion250% maxASTM D1056Compression deflectionCompression deflection 25%2 - 5 psi 13.8 - 34.5 kPaASTM D1056	Density					ASTM D1056
Tensile strength 15 psi min 103 kPa min ASTM D412 (Die A) Elongation 100% min ASTM D412 (Die A) Fluid immersion 250% max ASTM D1056 Compression deflection Compression deflection 25% 2 - 5 psi 13.8 - 34.5 kPa	Mechanical properties					
103 kPa min	Compression set	40% max				ASTM D1056
Fluid immersion 250% max ASTM D1056 Compression deflection Compression deflection 25% 2 - 5 psi 13.8 - 34.5 kPa ASTM D1056	Tensile strength					ASTM D412 (Die A)
Compression deflection 2 - 5 psi 13.8 - 34.5 kPa ASTM D1056	Elongation	100% min				ASTM D412 (Die A)
Compression deflection 25% 2 - 5 psi ASTM D1056 13.8 - 34.5 kPa	Fluid immersion	250% max				ASTM D1056
13.8 - 34.5 kPa	Compression deflection					
Change in compression deflection +30 %	Compression deflection 25%					ASTM D1056
ASTIM D1000	Change in compression deflection	±30 %				ASTM D1056

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ABOUT ARMACELL

As the inventor of flexible foam for equipment insulation and a leading provider of engineered foams, Armacell develops innovative and safe thermal and mechanical solutions that create sustainable value for its customers. Armacell's products significantly contribute to global energy efficiency making a difference around the world every day. With more than 3,300 employees and 25 production plants in 19 countries, the company operates two main businesses, Advanced Insulation and Engineered Foams. Armacell focuses on insulation materials for technical equipment, high-performance foams for acoustic and lightweight applications, recycled PET products, next-generation aerogel technology and passive fire protection systems.

