



INDUSTRIAL STRENGTH

EnsoLite IR41

Engineered to meet regulatory requirements for industrial and electrical enclosure gaskets.

- // Soft firmness
- // Superior oil and fuel resistance
- // Superior fire performance
- // Thin gauge, skin 2 sides



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TECHNICAL DATA - ENSOLITE IR41

Brief description	IR41 is a NBR/PVC/CR closed cell foam product produced in continuous rolls. This product is a soft, low density foam that meets ASTM D 1056 2B1 requirements. This product has excellent flame performance. This product is UL listed to UL94 flammability and UL gasket & seals. Additionally, this product has good recovery after compression and excellent oil/fuel resistance.
Product color range	Black
ASTM D 1056 Designation	2A1/2C1/2B1
Cell structure	Closed
Form	Roll
Polymer	NBR/PVC/CR
Skin	S2S (Skin 2 sides)
Markets	Electrical, Equipment
Applications	Gaskets and seals

Property	Value / Assessment				Standard / Test method
Temperature range					
Service temperature	Min. °C	Min. °F	Max. °C (intermittent)	Max. °F (intermittent)	ASTM D1056
	-40	-40	93.3	200	
Flammability					
Flame FMVSS 302 (burn rate)	3.94 in/minute (100 mm/minute) max Passes at 0.125 in (3.18 mm) and higher				FMVSS 302
Vertical flammability test for aircraft interior plastics (12 seconds)	Passes at 0.125 in (3.18 mm) and higher				FAR 25.853
UL standards					
UL94 HBF	Passes at 6 mm (0.236 in) minimum thickness UL File # QORU2.E535094 & # QORU8.E535094				UL 94
Resistance to water					
Water absorption by vacuum	10% max				ASTM D1056
Physical attributes					
Density	4* - 10* lb/ft ³ 64.1* - 160* kg/m ³				ASTM D1056
	*Thicknesses ≤ 0.250 in (6.35 mm) Density is 4 - 10 lb/ft ³ (64.1 - 160 kg/m ³)				
	*Thicknesses > 0.250 in (6.35 mm) Density is 4 - 7 lb/ft ³ (64.1 - 112 kg/m ³)				
Mechanical properties					
Compression set	25% max				ASTM D1056
Tensile strength	50 psi min 345 kPa min				ASTM D412 (Die A)
Elongation	100% min				ASTM D412 (Die A)
Tear strength	12 lb/in min 2.1 kN/m min				ASTM D624 (Die C)
Hardness durometer shore 00	30 - 50				ASTM D2240
Fluid immersion	100% max				ASTM D1056

Property	Value / Assessment	Standard / Test method
Compression deflection		
Compression deflection 25%	2* - 7* psi 13.8* - 48.3* kPa *Thicknesses < 0.250 in (6.35 mm) the 25% CD is 2 - 7 psi (13.8 - 48.3 kPa) *Thicknesses > 0.250 in (6.35 mm) the 25% CD is 2 - 5 psi (13.8 - 34.5 kPa)	ASTM D1056
Change in compression deflection	±30 %	ASTM D1056
UL Listed		
UL gaskets and seals	UL File # JMST2.MH30018 UL50 and UL50E continuous and periodic recompression applications for enclosure types: 2, 3, 3R, 3RX, 3S, 3SX, 4, 4X, 5, 6, 6P UL gaskets & seals max service temperature: 60°C (140°F)	UL 50E, UL 50

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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.

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