



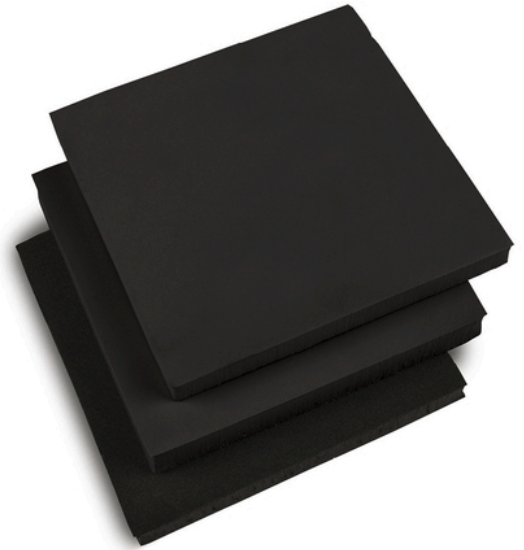
DRIVEN BY PERFORMANCE

# EnsoLite IV1

Engineered for a wide array of sealing and gasket applications where flame requirements are important.

- // Soft firmness
- // Good oil and fuel resistance
- // Superior flame performance
- // Meets OEM specifications

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## TECHNICAL DATA - ENSOLITE IV1

|                         |   |
|-------------------------|---|
| Brief description       | IV1 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 2C1 requirements. This product has excellent flame performance for automotive and aerospace applications, is UL listed to UL94 flammability, and meets FAA FAR 12 second vertical burn requirements. This product is also UL listed for UL gasket & seals. This product meets automotive specifications. |
| Product color range     | Black   |
| ASTM D 1056 Designation | 2A1/2C1   |
| Cell structure          | Closed  |
| Form                    | Roll  |
| Polymer                 | NBR/PVC/CR  |
| Skin                    | S2S (Skin 2 sides)  |
| Markets                 | Aerospace, Automotive, Electrical   |
| Applications            | Gaskets and seals   |

| Source                              | Specification            | Comments |
|-------------------------------------|--------------------------|----------|
| <b>Approvals and specifications</b> |                          |          |
| Stellantis (FCA / Chrysler)         | MSAY 516 MS.90145 Type 1 |          |

| Property   | Value / Assessment  |         |                        |                        | Standard / Test method |
|--|---|---------|------------------------|------------------------|------------------------|
| <b>Temperature range</b>   |   |         |                        |                        |                        |
| Service temperature  | Min. °C   | Min. °F | Max. °C (intermittent) | Max. °F (intermittent) | ASTM D1056             |
|  | -40   | -40     | 93.3                   | 200                    |                        |
| <b>Flammability</b>  |   |         |                        |                        |                        |
| Flame FMVSS 302 (burn rate)  | 3.94 in/minute (100 mm/minute) max<br>Passes at 0.125 in (3.18 mm) and higher               |         |                        |                        | FMVSS 302              |
| Vertical flammability test for aircraft interior plastics (12 seconds) | Passes at 0.250 in (6.35 mm) and higher   |         |                        |                        | FAR 25.853             |
| <b>UL standards</b>  |   |         |                        |                        |                        |
| UL94 HF-1  | Passes at 1.3 mm (0.051 in) minimum thickness<br>UL File # QORU2.E535094 & # QORU8.E535094  |         |                        |                        | UL 94                  |
| UL94 V-0   | Passes at 11.7 mm (0.460 in) minimum thickness<br>UL File # QORU2.E535094 & # QORU8.E535094 |         |                        |                        | UL 94                  |
| <b>Resistance to water</b>   |   |         |                        |                        |                        |
| Water absorption by vacuum   | 5% max  |         |                        |                        | ASTM D1056             |
| <b>Physical attributes</b>   |   |         |                        |                        |                        |
| Density  | 3 - 5 lb/ft <sup>3</sup><br>48.1 - 80.1 kg/m <sup>3</sup>                                   |         |                        |                        | ASTM D1056             |
| <b>Mechanical properties</b>   |   |         |                        |                        |                        |
| Compression set  | 40% max   |         |                        |                        | ASTM D1056             |
| Tensile strength   | 50 psi min<br>345 kPa min   |         |                        |                        | ASTM D412 (Die A)      |

| Property                                 | Value / Assessment   | Standard / Test method |
|--|--|------------------------|
| Elongation                               | 100% min   | ASTM D412 (Die A)      |
| Tear strength                            | 9 lb/in min<br>1.58 kN/m min   | ASTM D624 (Die C)      |
| Hardness durometer shore 00              | 30 - 50  | ASTM D2240             |
| Resilience                               | 20 - 40%   | ASTM D2632             |
| Fluid immersion                          | 250% max   | ASTM D1056             |
| <b>Compression deflection</b>            |  |                        |
| Compression deflection 25%               | 2 - 5 psi<br>13.8 - 34.5 kPa   | ASTM D1056             |
| Compression deflection 50% - 60 sec hold | 6.96 - 14.07 psi<br>48.01 - 97 kPa   | ISO 3386-1             |
| Change in compression deflection         | ±30 %  | ASTM D1056             |
| <b>UL Listed</b>                         |  |                        |
| UL gaskets and seals                     | UL File # JMST2.MH10189<br>UL50 and UL50E continuous and periodic recompression applications for enclosure types:<br>2, 3, 3R, 3RX, 3S, 3SX, 4, 4X, 5, 6, 6P, 12, 12K and 13<br>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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