

Polymer Aerogel Isolation Foam



Extremely high-R factor ~7 insulation, flexible, not brittle

DATASHEET

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Optowares' ARGL polymer aerogels are synthetic, porous, ultralight materials with exceptionally low density and thermal conductivity—ideal for thermal insulation and isolation. These aerogels provide high-R-value insulation and offer a cost-effective solution for applications that require ultra-high R value insulation. Unlike conventional aerogels, which are often brittle, dusty, and require expensive feedstocks, ARGL materials are mechanically robust, flexible, environmentally friendly, and durable. They exhibit a unique combination of properties including nanometer-sized pores, lightweight structure, and superior insulation performance. Optowares has revolutionized the aerogel industry by producing affordable, practical aerogels for real-world applications.

Features

- High R-value insulation 6.5 - 7 / inch
- Durable and less prone to convective currents
- Modulus of 4k-13k PSI
- High compressive and tensile strength
- Environmental Friendly

Specifications

Parameter	Min	Typical	Max	Unit
R-Value		6.5	7	/inch
Elastic Modulus				MPa
Tensile Strength				MPa
Compressive Strength				MPa

Applications

- Aerospace Insulation
- Outer Space Insulation
- Sports Gears
- Instrumentation

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