

Product Information

ROHACELL® RIST-HT

FOAM FOR VACUUM INFUSION PROCESSES

ROHACELL® RIST-HT (heat treated) is closed-cell rigid foam based on polymethacrylimide (PMI) chemistry that is completely free of CFC's and specially developed for use as a structural core in connection with vacuum infusion processes. All RIST-HT products are heat treated before delivery to customers.

Its mechanical and thermomechanical properties are similar to those of ROHACELL® WF. Its cell size, however, represents an optimal compromise between low resin uptake – about 50% less than for ROHACELL® WF – and satisfactory bonding of the facings to the core.

PROCESSING AND PRODUCTION

The optimized cell structure of **ROHACELL® RIST-HT** makes it particularly suitable for vacuum infusion and RTM processes, where it can be used at temperatures up to 180 °C (356 °F) with pressures up to 0.7 MPa (102 psi).

THERMOFORMING AND SHAPING

ROHACELL® RIST-HT can be easily thermoformed or CNC machined to meet customer requirements.

High precision, pre-shaped and ready-to-use foam cores in complex or simple geometries can also be supplied by the ROHACELL® Shapes Department.

| Property | Test Method* | Unit | ROHACELL® 51 RIST-HT | ROHACELL® 71 RIST-HT | ROHACELL® 110 RIST-HT |
|----------------------------------|-------------------------|--|-------------------------|-------------------------|--------------------------|
| Density | ISO 845 ASTM D 1622 | kg/m ³ lbs/ft ³ | 52 3.25 | 75 4.68 | 110 6.87 |
| Compressive Strength | ISO 844 ASTM D 1621 | MPa psi | 0.8 116 | 1.7 246 | 3.6 522 |
| Tensile Strength | ISO 527-2 ASTM D 638 | MPa psi | 1.6 232 | 2.2 319 | 3.7 536 |
| Tensile Modulus | ISO 527-2 ASTM D 638 | MPa psi | 75 10,875 | 105 15,225 | 180 26,100 |
| Elongation at Break | ISO 527-2 ASTM D 638 | % | 3 | 3 | 3 |
| Shear Strength | DIN 53294 ASTM C 273 | MPa psi | 0.8 116 | 1.3 188 | 2.4 348 |
| Shear Modulus | DIN 53294 ASTM C 273 | MPa psi | 24 3,480 | 42 6,090 | 70 10,170 |
| Coefficient of Thermal Expansion | | 1/K*10E-5 | 3.18 | 3.45 | 3.43 |

Technical data values presented above are typical for nominal density, subject to normal manufacturing variations. *Data values are based on ISO & DIN standard test methods, however ASTM values can be confirmed upon request. All ROHACELL® products are closed-cell rigid foams based on polymethacrylimide (PMI) chemistry and contain no CFC's.

FOR MORE INFORMATION

If you have questions or would like to discuss using **ROHACELL® RIST-HT** in your application, we encourage you to talk with your local ROHACELL® representative.

Visit www.rohacell.com to locate and directly connect with the contact in your region, by phone or email.

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