

Product Information

ROHACRYL™ SW

ROHACRYL™ is an exciting new product from the Performance Foams business of Evonik Operations GmbH. Based on acrylate chemistry, this environmentally friendly core material solution is thermally stable and features excellent mechanical performance.

A NEW LIGHTWEIGHT CORE

ROHACRYL™ SW is a closed-cell foam with a fine, homogeneous cell structure that is free of harmful CFC's content. The small cell size makes it possible to keep resin uptake at the surface of the foam core to a strict minimum.

This novel rigid foam product is ideal for lightweight sandwich construction in a wide variety of applications in industries like wind energy, sports equipment, lifestyle, marine and sub-sea, as well as automotive and industrial markets.

ROHACRYL™ SW core is easy to thermoform and can be machined using standard CNC equipment.

BENEFITS OF ROHACRYL™

Finished part mass can be reduced due to significantly lower resin uptake compared to established foam core materials. Furthermore, the core material shows excellent mechanical properties while the core density is kept to a minimum.

High thermal stability enables short cycle times in production processes, like vacuum assisted resin infusion (VARI).

ROHACRYL™ exhibits **superior fatigue behavior** which extends the final part's lifetime.

The combination of benefits results in **increased overall cost savings** in finished part production.

ROHACRYL™ SW MECHANICAL PROPERTIES

| Property | Test Method | Unit | 60 SW | 80 SW | 100 SW |
|---------------------------|-------------|------------------|--------------|--------------|---------------|
| Density | ASTM 1622 | kg/m³ lbs/ft³ | 60 3.75 | 80 5.00 | 100 6.25 |
| Compressive Strength | ASTM 1621 | MPa psi | 0.80 115 | 1.40 200 | 2.00 290 |
| Compressive Modulus | ASTM 1621 | MPa psi | 40 5,800 | 70 10,150 | 105 15,230 |
| Tensile Strength | ASTM D638 | MPa psi | 1.6 230 | 2.20 320 | 2.79 405 |
| Tensile Modulus | ASTM D638 | MPa psi | 70 10,150 | 98 14,200 | 127 18,400 |
| Shear Elongation at Break | ASTM C273 | % | > 6.0 | > 6.0 | > 6.0 |
| Shear Strength | ASTM C273 | MPa psi | 0.75 110 | 1.23 175 | 1.70 245 |
| Shear Modulus | ASTM C273 | MPa psi | 25 3,600 | 38 5,500 | 52 7,500 |

Technical data values presented above are based on an initial set of test data for nominal densities, subject to normal manufacturing variations. Due to the limited data set, the presented values listed for ROHACRYL™ SW are preliminary. Currently, large-scale testing is in progress. All ROHACRYL™ products are closed-cell rigid foams based on acrylate chemistry and contain no CFC's.

INTERESTED IN ROHACRYL™ FOAM?

Speak with your local Performance Foams representative or contact:

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