

## Evonik Corporation Rohacell® 31 HF High Frequency Grade Polymethacrylimide (PMI) Foam

Category : Other Engineering Material , Composite Core Material , Polymer , Thermoset , Polymethacrylimide

### Material Notes:

Description: ROHACELL® is produced by thermal expansion of a co-polymer sheet of methacrylic acid and methacrylonitrile. During the foaming process the copolymer sheet is converted to PMI - PolyMethacrylimide. Alcohol is used as a blowing agent, thus ROHACELL® contains no fluorinated carbon hydrates and is halogen free. It has a very homogeneous cell structure and isotropic properties. Specific Notes for this Material: ROHACELL® HF (= High Frequency) is a closed-cell rigid foam plastic based on PMI (polymethacrylimide) which does not contain any CFCs. The fields of application for ROHACELL® HF are antennas, radomes and X-ray tables. Curing temperature up to 130C (266F). Curing pressure up to 0.35 MPa (50 psi). Sandwich components using ROHACELL® HF as core material can be realized in a single work step (= cocuring). ROHACELL® HF is easy to shape. Thermoformability is another advantage of the core material. Information provided by degussa.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Evonik-Corporation-Rohacell-31-HF-High-Frequency-Grade-Polymethacrylimide-PMI-Foam.php](http://www.lookpolymers.com/polymer_Evonik-Corporation-Rohacell-31-HF-High-Frequency-Grade-Polymethacrylimide-PMI-Foam.php)

Physical Properties	Metric	English	Comments
Density	0.0320 g/cc	0.00116 lb/in <sup>3</sup>	DIN 53420, ISO 845, ASTM D 1622

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	1.00 MPa	145 psi	DIN 53455, ISO 527-2, ASTM D 638
Elongation at Break	3.5 %	3.5 %	DIN 53455, ISO 527-2, ASTM D 638
Modulus of Elasticity	0.0360 GPa	5.22 ksi	ISO 527-2, ASTM D 638
Compressive Strength	0.400 MPa	58.0 psi	DIN 53421, ISO 844, ASTM D 1621
Shear Modulus	0.0130 GPa	1.89 ksi	DIN 53294, ASTM C 273
Shear Strength	0.400 MPa	58.0 psi	DIN 53294, ASTM C 273

Thermal Properties	Metric	English	Comments
Maximum Service Temperature, Air	180 °C	356 °F	Heat Distortion Resistance; DIN 53424

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215, Fengxian District, Shanghai City, China