

TECHNICAL DATASHEET

MILLIFOAM TGC50R

MILLIFOAM® TGC50R is a closed-cell, recyclable rigid polymer foam based on polyphenylsulfone (PPSU) chemistry. It offers excellent fire, smoke and toxicity (FST) properties and exceeds FAR 25.853 requirements for flammability. The foam is qualified by AIRBUS under AIMS 04-11-008 and ABS5927 standard for aircraft interior parts. Its excellent low dielectric constant and transmission properties make it ideal for the use in antenna systems and radomes.

Polymer	PPSU	Sheet Size	2500 x 590 mm
Thickness range	1.0-6.0 mm	Supplier	Airex AG

MILLIFOAM® TGC50R can be cut, bonded and thermoformed without suffering from excessive spring-back or shrink. It withstands prolonged exposure to water, chemicals and temperatures ranging from -40°C to 204°C (-40°F to 400°F). As material in sandwich structures it is hot and cold formable and gives additionally freedom for design innovation.

Properties

Density (ISO 845)	55 kg/m ³
Compressive Strength (ISO 844)	0.65 MPa
Compressive Modulus (ISO 844)	30 MPa
Tensile Strength (ASTM C297)	1.1 MPa
Shear Strength (ISO 1922)	0.75 MPa
Shear Modulus (ISO 1922)	9.3 MPa
Thermal Conductivity (ISO 8301)	0.038 W/mK
Max. Curing Temperature	130-180°C (270-360°F)
Thermoforming Temperature	205-210°C (400-410°F)

Disclaimer

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