



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 for aerospace interior designs and exceeds FAR 25.853 requirements for flammability and HL3 requirements for R1 applications. 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	Solvay

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. The thermoforming process window depends on geometry, applied stretching, thermoforming method and sheet thickness.

MILLIFOAM® TGC50R Properties*	
Density	53 kg/m ³
Compressive Strength	0.65 MPa
Compressive Modulus	23 MPa
Tensile Strength	1.1 MPa
Shear Strength	0.75 MPa
Shear Modulus	9.3 MPa
Dielectric constant @ 10GHz	1.015
Loss tangent @ 10GHz	0.0095
Coefficient of Thermal Expansion	4.2 1/K*10E-5
Thermoforming Temperature	205-230°C (401-446°F)

*Data refer to original vendor information

For more information please visit our homepage www.4a-manufacturing.at or contact us directly by phone or e-mail.

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