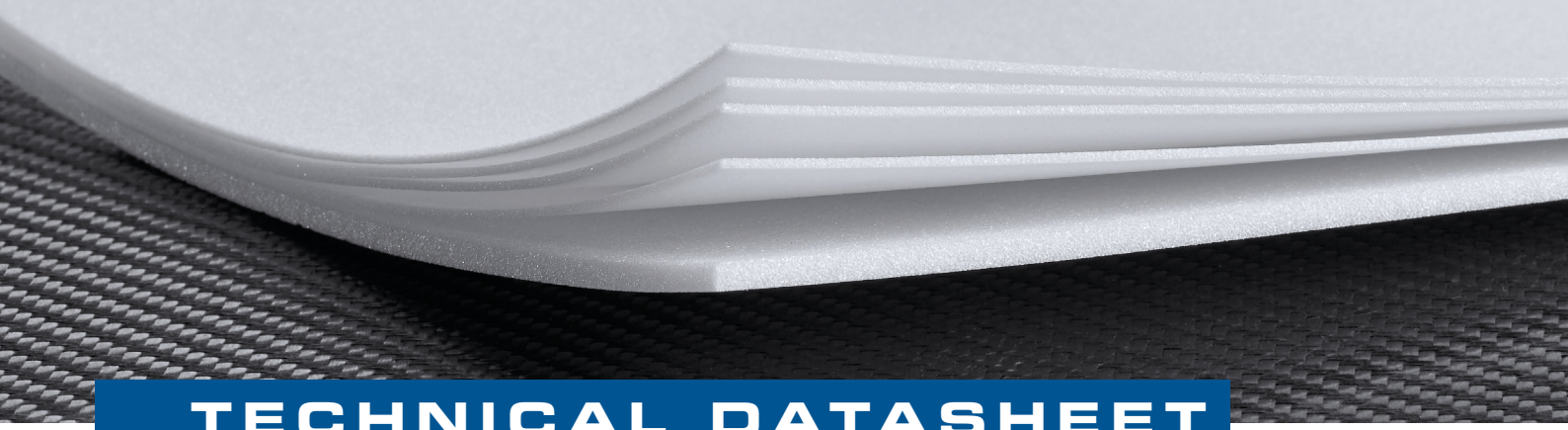

TECHNICAL DATASHEET

MILLIFOAM ULT80XP

MILLIFOAM® ULT80XP is an open-cell, thermoplastic foam based on polyetherimide (PEI) chemistry. It offers excellent fire, smoke and toxicity (FST) properties combined with a low moisture absorption and a high strength to weight ratio. With its extremely low dielectric constant and transmission properties the foam is suitable for antenna systems and radome applications.

Polymer	PEI	Sheet Size	2445 x 610 mm
Thickness range	0.5-4.0 mm	Supplier	Sabic

MILLIFOAM® ULT80XP is thermoformable and compatible with a wide range of different skin layers and adhesives. Due to its excellent drapeability it can be easily used as core layer in 3D sandwich structures.

Properties	
Density	80 kg/m³
Compressive Strength	1.2 MPa
Compressive Modulus	71 MPa
Tensile Strength	1.7 MPa
Tensile Modulus	37 MPa
Shear Strength	1.0 MPa
Shear Modulus	19 MPa
Dielectric Constant @ 20GHz	1.218
Loss tangent @ 20GHz	$3.1*10^{-5}$
Dielectric Constant @ 40GHz	1.215
Loss tangent @ 40GHz	$1,2*10^{-4}$
Thermoforming Temperature	205-210°C (400-410°F)

Disclaimer
MILLIFOAM® is a registered trademark of 4a manufacturing GmbH. We have taken great care in preparing the presented data and technical advice. However, the data is based on vendor information and no warranty is made, either expressed or implied, regarding its accuracy or the results to be obtained from the use of such information.

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