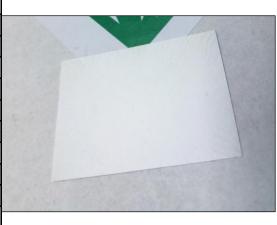


## Nanomats for Aerospace

A breakthrough heat shielding product has been developed by using flexible ceramic nanofibers (Flexiramics) that exceeds the newest emerging performance requirements. Flexiramics is a fire-resistant and lightweight ceramic non-woven nanofiber mat with highly insulating properties. It's lightweight makes it attractive for use in multilayer insulation systems. Please feel free to contact us

Properties	
Physical	
Chemical composition	$\alpha\text{-Al}_2\text{O}_3,\ \text{YSZ},\ \text{contact}\ \text{Eurekite}\ \text{for other}\ \text{compositions}$
Microstructure	Non-woven nanofiber mat
Size	10 x 10 cm (A4 and larger in development
Density	0.1 to 0.8 g/cm <sup>3</sup> 5-20 g/m <sup>2</sup>
Thickness	20 to 100 μm, contact Eurekite for other thicknesses
Porosity	90 to 96%
Fiber diameter	250 to 1000 nm
Mechanical	
Young's Modulus	0.5 to 1.5 MPa (in-house characterization)
Tensile Strength	0.1 to 0.3 MPa (in-house characterization)
Bending Radius	0° (i.e. fully flexible)
Thermal	
Thermal Conductivity	0.033 W/m·K
Weight loss	≤ 1% at 900°C
Optical	
Color	White
Chemical resistance	
	Typically similar to bulk ceramics of same composition (under investigation)



EUREKITE

Tel: +31 639 88 60 72 www: Eurekite.com Email: info@eurekite.com