

# ExtremeDegree®

## By Arctic Thermal Innovation

### AeroFabric – Aerogel Insulation Sheet

AeroFabric is a cutting-edge aerogel fabric with up to 5 times the thermal insulation performance vs. traditional synthetic insulation fabrics. AeroFabric has been specifically engineered for use in performance clothing and cryogenic applications. It is stretchable, highly flexible, easy to cut and dust-free.

AeroFabric combines excellent thermal insulation performance with a thin, flexible profile that has been developed for easy sewing and bonding into clothing and textile applications.

#### Technical Information

Properties	AeroFabric X	AeroFabric XP
Composition	Non-Porous	Porous
Thermal Conductivity @20°C (ASTM C177)	0.018 - 0.024 W/mK	0.018 - 0.024 W/mK
Waterproof Rating	40,000+ mm	N/A
Density (@ 2mm thickness)	95 ± 25 g/sqm	90 ± 25 g/sqm
Breaking Elongation (ATM D5034)	> 160%	> 155%
Breaking Strength	> 0.2 MPa	> 0.2 MPa
Color	Off-White (custom colors available)	Off-White (custom colors available)
Standard Thickness* <i>*0.5mm and 1mm custom thickness available</i>	2mm, 3mm	2mm, 3mm
Operating Temperature Range	-90°C (-130°F) to 90°C (194°F)	-90°C (-130°F) to 90°C (194°F)
Maximum Temperature	185°C (365°F)	185°C (365°F)
Standard Roll Width	1.45m (58 inches)	1.45m (58 inches)

#### Key Performance Advantages

- Best in class thermal insulation.
- Flexible and stretchy.
- Easy handling.
- Zero dusting.
- Easy to cut, sew and laminate.
- Ultra thin profile.
- Washable.
- Zero Waste (excess materials may be re-used)

#### Appearance



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