

# AT 1181 - ALPHAPROOF SB

NANO-CERAMIC COATING

TECHNICAL DATA SHEET

AT 1181 - AlphaProof SB is a VOC exempt, environmentally friendly solvent based coating that creates an extremely water repellent hydrophobic surface. Treated fabrics will shed water quickly while remaining breathable. AT 1181 is UV resistant and has no residual odor. Treated fabrics remain very soft and flexible. AT 1181 bonds with fibers to create long-term durable performance and enhanced tensile strength. Treated fibers are covered in a self-lubricating dry film that reduces friction to improve performance and reduce wear. AT 1181 is non-flammable and will decrease flame spread in treated fabrics.

Proudly manufactured in the USA.

## Technical Data

<b>Color</b>	Clear
<b>Viscosity</b>	12 sec. #2 Zahn
<b>Percent of Solids (%)</b>	14
<b>V.O.C</b>	Exempt per CFR 51.1 / Regulation 8
<b>RoHS</b>	Compliant
<b>REACH</b>	Compliant
<b>Halogens</b>	None
<b>Thermal Stability (cured)</b>	1200°F (648.8°C)
<b>Conical Bond (1/8" Mandrel) (ASTM D522-93a)</b>	Passed
<b>Cross Cut Adhesion (ASTM D3359)</b>	5B
<b>Coefficient of Friction (ASTM D2047)</b>	0.03μ
<b>Specific Gravity (ASTM D891-09)</b>	0.889
<b>Pencil Hardness (ASTM D3363)</b>	8h
<b>Odor (liquid)</b>	Slight Solvent
<b>Odor (cured)</b>	None

## Drying and Coverage Rate

<b>Average Applied Dry Film Thickness</b>	2 to 3 microns
<b>Estimated Coverage Rate (@2 microns)</b> *Absorbency of the solution into the substrate will vary results)	2,850 ft <sup>2</sup> (265 m <sup>2</sup> ) per gallon
<b>Dry to Touch Time (@ 77°F / 25°C)</b> *Exposing to a warmer air flow (not exceeding 110°F) will reduce drying and full cure time	15 – 25 minutes (average)
<b>Ambient Cure (Full Properties)</b>	12+ hours

## Key Performance Properties

- Hydrophobic water repellent surface.
- Self cleaning.
- Anti-icing.
- UV resistance.
- Flexible and supple.
- Breathable.
- Excellent adhesion.
- Little or no change in color.
- Non-flammable.
- Lubricates fibers for reduced friction, increased performance, and enhanced durability.
- Excellent coverage rate.
- Easily applied by dip, brush, wipe or spray.
- Ambient cure, short dry time.
- Environmentally friendly. VOC Exempt. Will not harm marine life.
- RoHS and REACH compliant.

## Common Applications

- Clothing
- Leather goods
- Textiles and woven fabrics (e.g. nylon, cotton, polyester, etc.)
- Rope
- Cord
- Threads
- Tarps, tents and outdoor equipment

## Supplemental Information

AT 1181 provides maximum performance versus AT 1180 (water based). Consult your AlphaTek representative to understand the best solution for your specific requirements.