



Product name	AlphaTec® 1800 STANDARD
Product material	Microporous polyethylene laminate nonwoven
Color	White
Material weight	53 gsm / 1.56 oz/yd ²

Physical Properties			
Test Method		Units	Results
Tensile strength (MD)	ASTM D5034	lbs in ⁻¹	17.7
Tensile strength (CD)			24.4
Tear resistance (MD)	ASTM D5733	lbs in ⁻¹	7.2
Tear resistance (CD)			12.4
Burst strength	ASTM D3787	lbs in ⁻¹	21
Surface resistance at RH 40% - Inner	AATCC 76	Ohms	3.43 x 10 ⁹
Surface resistance at RH 40% - Outer			8.34 x 10 ⁹
Surface resistance at RH 20% - Inner			3.05 x 10 ¹⁰
Surface resistance at RH 20% - Outer			4.25 x 10 ¹⁰
Flame spread	16 CFR Part 1610	sec	17.3 - Class 1

Additional Testing			
Test Method		Units	Results
Anti-static Properties (EN 1149-5)	EN 1149-3 (Charge Decay)	t ₅₀ < 4 s	Pass
Whole suit particle inward leakage*	ISO 13982-2	% TIL	3.96%
Hydrostatic Head (Water Pressure Test)	AATCC 127	cm H ₂ O	>100
	Limited by test equipment. ISO 811 result >100cm H ₂ O		

Comfort Testing			
Test Method		Units	Results
Moisture vapor transmission	ASTM E96 Method B	g/m ² /24 hr	709
Air permeability	ASTM D737	ft ³ ft ⁻² min ⁻¹	<0.13

Chemical Penetration under Pressure Performance

Test Chemical	Test Method	Unit	Results
Hexamethylene diisocyanate commercial mixture (HDI) **	ASTM F903 Procedure C (penetration under pressure)	min	>60
4,4 -methylenediphenyl diisocyanate commercial mixture (MDI) ***			>60

Fabric Repellence & Penetration to Liquid Chemicals - EN 14325:2004

Test Chemical	Test Method	Penetration Result (%)	EN Class	Repellency Result (%)	EN Class
Sulfuric Acid (30% w/w)	EN ISO 6530	<1	3 of 3	>95	3 of 3
Sodium Hydroxide (10% w/w)		<1	3 of 3	>95	3 of 3

Whole Suit Testing

Test Method	
EN ISO 13982-1:2004+A1:2010	Type 5 : Particle Test
EN 13034:2005+A1:2009	Type 6 : Reduced Spray Test

- * Whole suit particle inward leakage testing performed with self-adhesive tape sealing the full face respirator, gloves and boots to the coverall and additional tape applied over the zipper flap. Particle size range of 0.02-2 microns with a mass median of 0.6 microns. Data for model 111 coveralls. Result for other models may vary. Please email the Ansell technical team for information on a specific model at customerserviceus@ansell.com
- ** Consisting of hexamethylene diisocyanate Polymer, 57.23%, CAS 28182-81-2 n-Butyl Acetate, 42.66%, CAS 123-86-4 Hexamethylene Diisocyanate (max.), 0.11%, CAS 822-06-0 (Tested on 11/30/2020). This mixture is representative of HDI's.
- *** Consisting of 4,4-methylenediphenyl diisocyanate, 25-50%, CAS 101-69-8; Isocyanic acid, polymethylenepolyphenylene ester polymer, 10- 25%, CAS 67815-87-6, o-(p-isocyanatobenzyl)phenyl isocyanate, 10-15%, CAS 5873-54-1, 1,2-Propanediol polymer, 10-25%, CAS 72088-97-2 (Tested on 12/11-2020). This mixture is representative of MDI's.

Safety Note: All chemical tests and breakthrough times given relate to laboratory tests on fabrics only. Seams and closures may have lower breakthrough times, particularly when worn or damaged. It is the user's responsibility to select an appropriate garment, gloves, boots and other equipment for the particular use. The user shall be responsible for determining how long the garment can be worn for the particular use and whether it can be suitably cleaned for re-use. Ansell Limited does not give any warranties or make any representations about its garments other than those contained in the official literature supplied by Ansell Limited with each garment. Ansell 2024. All rights Reserved.