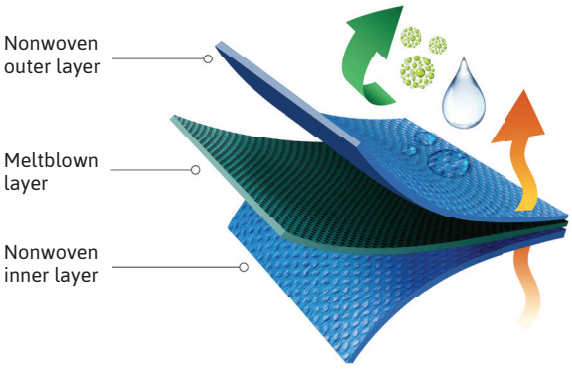
AlphaTec®

1500 PLUS FABRIC - TECHNICAL DATA



Product name	AlphaTec® 1500 PLUS
Product material	SMS nonwoven with anti-static treatment
Colours available	White, Navy, Light Blue
Material weight	White 48gsm, Navy 50gsm, Light Blue 60gsm

Physical Properties - EN 14325:2004

Test Method		Result (White fabric)	EN Class (White fabric)	Result (Blue fabric)	EN Class (Blue fabric)	Result (Navy fabric)	EN Class (Navy fabric)
Abrasion	EN 530	>100 Cycles	2 of 6	>100 Cycles	2 of 6	>100 Cycles	2 of 6
Flex cracking	EN ISO 7854	>40,000 Cycles	5 of 6	>100,000 Cycles	6 of 6	>100,000 Cycles	6 of 6
Tear resistance (MD)	EN ISO 9073-4	>60 N	2 of 6	>20 N	2 of 6	>60 N	2 of 6
Tear resistance (CD)		>20 N		>100 N		>20 N	
Tensile strength (MD)	EN ISO 13934-1	>100 N	2 of 6	>100 N	2 of 6	>100 N	1 of 6
Tensile strength (CD)		>60 N		>60 N		>30 N	
Puncture resistance	EN 863	>5 N	1 of 6	>5 N	1 of 6	>5 N	1 of 6
Seam Strength	EN ISO 13935-2	>75 N	3 of 6	>75 N	3 of 6	>75 N	3 of 6

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

Fabric Repellence of Liquids

Test Chemical	Test Method	Result % (White fabric)	EN Class (White fabric)	Result % (Blue fabric)	EN Class (Blue fabric)	Result % (Navy fabric)	EN Class (Navy fabric)
Sulphuric Acid (30% w/w)	EN ISO 6530	>95	3 of 3	>95	3 of 3	>90	2 of 3
Sodium Hydroxide (10% w/w)		>95	3 of 3	>90	2 of 3	>95	3 of 3

Fabric Penetration Resistance of Liquids

Sulphuric Acid (30% w/w)	EN ISO 6530	<1	3 of 3	<1	3 of 3	<1	3 of 3
Sodium Hydroxide (10% w/w)		<1	3 of 3	<1	3 of 3	<1	3 of 3

Additional Testing

Test Method		Result (White fabric)	EN Class (White fabric)	Result (Blue fabric)	EN Class (Blue fabric)	Result (Navy fabric)	EN Class (Navy fabric)
Anti-static Properties (EN 1149-5)	EN 1149-3 (Charge Decay)	t_{50} <4 s	Pass	t_{50} <4 s	Pass	t_{50} <4 s	Pass

V. 0822

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
EN 1073-2:2002	Radioactive Particulates (Class 1 of 6)*

* Coverall tested to EN 1073-2 for barrier to radioactive particles, with the exception of Clause 4.2: Puncture resistance achieves Class 1 versus the requirement of Class 2. Resistance to ignition is not tested as product already carries flammability warning. Note: Does not protect against ionizing radiation.

Comfort Testing							
Test Method		**Result (White fabric)**	**Units**	**Result (Blue fabric)**	**EN Class (Blue fabric)**	**Result (Navy fabric)**	**EN Class (Navy fabric)**
Air Permeability: Gurley Method	ISO 5636-5	1.27	s 100 cm^{-2}	1.27	s 100 cm^{-2}	1.27	s 100 cm^{-2}
Water Vapour Resistance (R_{et})	EN 31092/ISO 11092	2.00	$m^2 \cdot Pa/W$	1.90	$m^2 \cdot Pa/W$	1.43	$m^2 \cdot Pa/W$
Thermal Resistance (R_{ct})	EN 31092/ISO 11092	0.019	$m^2 \cdot K/W$	0.021	$m^2 \cdot K/W$	0.025	$m^2 \cdot K/W$
Water Vapour Permeability Index (WVPI)		0.582	-	0.657	-	1.028	-
Clothing Insultation (clo) value		0.125	-	0.134	-	0.158	-