

## SENSORY PROTECTION

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AREAS OF USE																								
<ul style="list-style-type: none"> <li>These coveralls are designed for protection against hazardous substances and contamination of both product and personnel.</li> <li>They are typically used, dependent upon the severity of the toxicity and conditions, for protection against airborne particles and limited non-toxic splash and spray.</li> <li>Recommended for single use applications only.</li> <li>Garment labels indicate product type, style code, manufacture date and standard approvals. Bag labels indicate product type, style code and manufacture date</li> </ul>																								
LIMITATIONS																								
<ul style="list-style-type: none"> <li>Exposure to certain chemicals or high concentrations, may require higher barrier properties of the fabric, or in the construction of the suit. Such conditions can be protected by garments the standards of Types 1 to 4, or possibly by a more protective material.</li> <li>Footwear appropriate to the intended use must be worn.</li> <li>These garments offer no protection to organic solvents, and must not be used in any such capacity..</li> </ul>																								
COMPLIANCE AND RESPONSIBILITY																								
<ul style="list-style-type: none"> <li>These garments are limited life chemical protective clothing manufactured to meet the requirements of the PPE Directive 89/689/EEC and subsequent amendments.</li> <li>Manufactured under ISO 9001 quality control procedures.</li> <li>The user shall be the sole judge of the suitability for the type of protection required, and the correct combinations of coveralls accessories and ancillary equipment.</li> <li>The manufacturer cannot be held responsible for any accident caused by misuse, or unsuitability of the garment for the task in progress.</li> <li>Ensure all seams and enclosures are intact. Worn, damaged or contaminated garments should not be used.</li> <li>In order to comply fully with performance requirements for Types 5/6 garments, all openings such as wrists, ankles, neck, etc., should be securely taped.</li> <li>Garments will protect only the parts of the body they cover. Connections with other PPE may require appropriate sealing.</li> <li>Fabric used in the construction of these garments has low air permeability and can cause heat stress and frequent rest is therefore advised. To obtain full protection, all apertures should be securely closed, but the user shall determine, and allow for, the effect of heat when in use. Heat stress and discomfort can be reduced by the use of appropriate undergarments or ventilation equipment.</li> </ul>																								
STORAGE AND DISPOSAL																								
<ul style="list-style-type: none"> <li>These garments can be stored in accordance with normal storage practice, and disposed of without harm to the environment.</li> <li>Restrictions on the disposal depend solely on the contamination during use. Contaminated clothing may be harmful and should be disposed of as hazardous waste in accordance with national regulations. If in doubt please contact your supplier.</li> <li>The manufacturer cannot accept responsibility for any improper use or disposal of garments produced by them</li> </ul>																								
GARMENT REMOVAL																								
<ul style="list-style-type: none"> <li>Care should be taken with the removal of any garment which may have been contaminated. The use of an assistant wearing gloves should be used to peel back the garment from the wearer, taking care that no contaminant comes into contact with either the assistant or the wearer.</li> </ul>																								
TECHNICAL PROPERTIES - EN 13034 / EN ISO 13982-1 / EN 1073-2 / EN 1149-5																								
		MAIN BODY FABRIC		BACK PANEL FABRIC																				
MATERIAL PERFORMANCE DATA																								
TEST	STANDARD	RESULT	CLASS	RESULT	CLASS																			
Abrasion Resistance	EN 530	> 10 cycles *(Note 1)	Class 1	> 10 cycles *(Note 1)	Class 1																			
Flex Cracking Resistance	ISO 7854	> 40,000 cycles *(Note 1)	Class 5	> 15,000 cycles *(Note 1)	Class 4																			
Tear Strength [Trapezoidal]	ISO 9073-4	MD = >40 N XD = >20 N	MD = Class 3 XD = Class 2	MD = >20 N XD = >20 N	MD = Class 2 XD = Class 2																			
Tensile Strength	ISO 13934-1	MD = >30 N XD = >60 N	MD = Class 1 XD = Class 2	MD = >60 N XD = >30 N	MD = Class 2 XD = Class 1																			
Puncture Resistance	EN 863	>5 N *(Note 2)	Class 1 *(Note 2)	>5 N *(Note 2)	Class 1 *(Note 2)																			
Seam Strength [Main Body Fabric-Main Body Fabric]	ISO 13935-2	>75 N	Class 3	----	----																			
Seam Strength [Main Body Fabric-Back Panel Fabric]		>75 N	Class 3																					
pH Value	ISO 3071	>3.5 and <9.5	PASS	>3.5 and <9.5	PASS																			
<p>KEY: MD = Machine Direction ; XD = Cross Direction</p> <p>Note 1: Visual endpoint.</p> <p>Note 2: The measured puncture resistance for both the main body fabric and back panel fabric were below the minimum 10N required by the EN 1073-2 standard. However they were sufficient to meet Class 1 according to the EN 13034 and EN 13937-2 standards. The end user must decide on the basis of a risk assessment, whether the puncture resistance of the fabrics is acceptable.</p>																								
RESISTANCE TO PENETRATION BY CHEMICALS [EN 368] - REPELLENCY INDEX [%] / RESISTANCE INDEX [%] [EN 14325]																								
CHEMICAL	RESULT REPELLENCY [%] / RESISTANCE [%]	CLASS REPELLENCY / RESISTANCE	RESULT REPELLENCY [%] / RESISTANCE [%]	CLASS REPELLENCY / RESISTANCE																				
Sulphuric Acid [H <sub>2</sub> SO <sub>4</sub> ] 30%	>95 % / >1 %	Class 3 / Class 3	>95 % / >1 %	Class 3 / Class 3																				
Sodium Hydroxide [NaOH] 10%	>95 % / >1 %	Class 3 / Class 3	>95 % / >1 %	Class 3 / Class 3																				
WHOLE SUIT TESTS [EN 13034 / EN ISO 13982-1]																								
TEST	STANDARD	RESULT	CLASS																					
Resistance To Penetration By Liquids. Type 6: Light Spray Test *(Note 3)	EN ISO 17491-4 & EN 13034 [Mod.]	PASS	----																					
Inward Leakage Of Aerosols Of Solid Particles. Type 5	EN ISO 13982-1	$I_{lim, 82/90} \leq 30\%$ ; $L_{s, 8/10} \leq 15\%$	PASS																					
<p>Note 3: Resistance to penetration by liquids in the form of a light spray. The test method EN ISO 17491-4 was modified as defined by EN 13034 for low-level spray testing conditions.</p>																								
PROTECTION AGAINST PARTICULATE RADIOACTIVE CONTAMINATION [EN 1073-2] [EXCLUDING CLAUSE 4.2 PUNCTURE RESISTANCE]																								
TEST	STANDARD	RESULT	CLASS																					
<b>Nominal Protection Factor</b>																								
Total Inward Leakage	EN ISO 13982-1	----	Class 1																					
PROTECTIVE CLOTHING - ELECTROSTATIC PROPERTIES [EN 1149-5]																								
TEST	STANDARD	RESULT	CLASS	RESULT	CLASS																			
Surface Resistance	EN 1149-1	$\leq 2.5 \times 10^9 \Omega$	PASS [Inner Surface]	----	----																			
Half Decay Time [t <sub>50</sub> ] or Shielding Factor [S]	EN 1149-3	----	----	t <sub>50</sub> < 4s and S > 0.2	PASS																			
ELECTROSTATIC PROPERTIES - COMPLIANCE AND RESPONSIBILITY																								
<ul style="list-style-type: none"> <li>Garments are anti-statically treated and comply to the electrostatic protection required by EN 1149-5, and must be used with compatible accessories and work practices to be effective.</li> <li>Electrostatic dissipative protective clothing to EN 1149-5 shall meet at least one of the following requirements: <ul style="list-style-type: none"> <li>Half Decay Time [t<sub>50</sub>] &lt; 4s or Shielding Factor [S] &gt; 0.2, tested according to EN 1149-3:2004, test method 2 (induction charging), or</li> <li>Surface Resistance of less than or equal to <math>2.5 \times 10^9 \Omega</math>, on at least one surface, tested according to EN 1149-1.</li> </ul> </li> <li>The person wearing the electrostatic dissipative protective clothing shall be properly earthed. The resistance between the person and the earth shall be less than 10<sup>8</sup> Ω, e.g. by wearing adequate footwear.</li> <li>Electrostatic dissipative protective clothing shall not be opened or removed whilst in the presence of flammable or explosive atmospheres or while handling flammable or explosive substances.</li> <li>Fasten the garment correctly, covering all non-complying materials. Where the garment is to be earthed through the skin, ensure that the cuffs are in contact with the skin at all times.</li> <li>Electrostatic dissipative clothing shall not be used in oxygen enriched atmospheres without the prior approval of the responsible safety engineer.</li> <li>The electrostatic dissipative performance of the electrostatic dissipative protective clothing can be affected by wear and tear, laundering and possible contamination.</li> <li>Electrostatic dissipative protective clothing shall permanently cover all non-complying materials during normal use, [including bending and movements].</li> <li>Not intended to protect against mains voltages.</li> </ul>																								
EXPLANATION OF LABEL SYMBOLS			GARMENT SIZES																					
	Protection Against Chemicals. EN 13034:2005+A1:2009 / EN ISO 13982-1:2004+A1:2010.		<p>Select appropriate size for wearer's chest and height.</p> <table border="1"> <thead> <tr> <th>SIZE</th> <th>CHEST [CM]</th> <th>HEIGHT [CM]</th> </tr> </thead> <tbody> <tr> <td>S</td> <td>84-92</td> <td>162-170</td> </tr> <tr> <td>M</td> <td>92-100</td> <td>168-176</td> </tr> <tr> <td>L</td> <td>100-108</td> <td>174-182</td> </tr> <tr> <td>XL</td> <td>108-116</td> <td>182-188</td> </tr> <tr> <td>XXL</td> <td>116-124</td> <td>188-194</td> </tr> <tr> <td>XXXL</td> <td>124-132</td> <td>194-200</td> </tr> </tbody> </table>	SIZE	CHEST [CM]	HEIGHT [CM]	S	84-92	162-170	M	92-100	168-176	L	100-108	174-182	XL	108-116	182-188	XXL	116-124	188-194	XXXL	124-132	194-200
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	Chemical Protective Clothing - Limited Protective Performance Against Liquid Chemicals. Type 6: EN 13034:2005+A1:2009. Light Spray.																							
	Chemical Protective Clothing - Protection Against Solid Particulates. Type 5: EN ISO 13982-1:2004+A1:2010. $I_{lim, 82/90} \leq 30\%$ ; $L_{s, 8/10} \leq 15\%$																							
	Protective Clothing Against Radioactive Contamination. [Non-Ventilated]. EN 1073-2:2002. [Excluding, Clause 4.2 Puncture Resistance]. TL: Class 1																							
	Electrostatic Properties EN 1149-5:2008. Electrostatic Dissipative Protective Clothing [Main Body: Surface Resistance Of $\leq 2.5 \times 10^9 \Omega$ [Inner Surface], Back Panel: S > 0.2.																							
	For Single Use Only. Do Not Re-use.																							
	Flammable material. Keep away from fire. These garments are flammable and will melt at 135°C																							
	Refer to user instruction.																							
CARE SYMBOLS																								
Do Not Wash	Do Not Bleach	Do Not Machine Dry	Do Not Iron	Do Not Dry Clean																				
<p>These products are manufactured subject to Article 11.B of European Council Directive 89/686/EEC, and subsequent amendments, under the supervision of the Notified Body whose identification number appears as part of the CE mark affixed to the product.</p> <p>Brand Manufacturer/Importer: Alpha Solway Ltd., Annan. DG12 5BL.</p> <p>EC-Type Examination Certification according to Article 10 of European Council Directive 89/686/EEC, and subsequent amendments. Certified by: SGS United Kingdom Ltd., 202B Worle Parkway, WESTON-SUPER-MARE, Somerset, BS22 6WA, UK. [N.B. No. 0120].</p>																								