

Chem-Tech® Chemical Splash Protective Clothing

Chem-Tech® is the latest generation of Chemical Splash Suit fabrics with a breath-able hydrophilic PTFE laminate. Elliotts range of Chem-Tech® Chemical Splash Protective Clothing is made from a high performance, high quality 5 layer breathable fabric manufactured specifically for the requirements of chemical splash protection.

High levels of comfort and protection

The Chem-Tech® range of fabrics allows vapour to transfer through the fabric while preventing liquid penetration by a variety of chemicals. Chem-Tech® Chemical Splash Protective Clothing allows the body to 'breathe', so your perspiration can evaporate reducing the possibility of heat stress and therefor improving wear comfort.

Many coated fabrics are non-breathable, and they do not allow moisture vapour through. Workers incur the risk of heat stress as this hinders the body's physiological cooling process. Chem-Tech® Chemical Splash Protective Clothing can provide the wearer with valuable time to access an emergency shower in the case of an accidental chemical splash.

Chem-Tech® breathable chemical splash fabric has been tested to ISO-11092 for water vapour resistance. Water vapour resistance measures the ability of textile fabrics to transfer body heat and moisture vapour away from the body through protective fabric layers and shows the benefits of wearing garments which can better manage metabolic heat.

Chem-Tech® Barrier Technology

Chem-Tech® Chemical Splash Protective Clothing is made from a high performance, high quality 5 layer breathable fabric manufactured specifically for the requirements of chemical splash protection.

Chem-Tech® Chemical Splash Protective Clothing

Features	
<ul style="list-style-type: none"> • Resists penetration of many liquid chemicals including aviation fuel and Sulphuric Acid(> 3 hours hold out) • Breathable (moisture vapour permeable) to optimise wearer comfort reducing heat stress and improving productivity • Also available in an anti-static flame resistant option - Chem-Tech® FRAS • Conforms to AS/NZS 1906.4 1997 'High Visibility Materials for Safety Garments' (fluoro orange) Clothing is third party certified to meet the requirements of AS/NZS 4602:1999 'High Visibility Safety Garments' • Multi-purpose garments affording limited protection against chemical hazards and also as a high performance multi-layer high visibility breathable wet weather garment, exhibiting optimum waterproof and water repellent properties. • Soft lightweight fabric • New enhanced PTFE barrier technology • Extremely durable, washable, reusable and easy to maintain • All seams sewn and seam sealed for extreme protection • Chemical resistance and breathability in one garment 	

Fabric Specifications		
	Chem-Tech	FRAS
Outer fabric	300D Polyester 100%	300D Polyester 98% carbon fibre 2%
Membrane	<p>An expanded-PTFE membrane providing liquid chemical penetration resistance and moisture vapour performance.</p> <p>A PU Hydrophilic Coating is applied to further improve the performance and increase the chemical hold out performance.</p>	<p>An expanded-PTFE membrane providing liquid chemical penetration resistance and moisture vapour performance.</p> <p>A PU Hydrophilic Coating is applied to further improve the performance and increase the chemical hold out performance..</p>
Total weight	Tricot knit to provide additional durability and protection of the inner membrane and PU Coating.	Tricot knit to provide additional durability and protection of the inner membrane and PU Coating.
Fabric weight	320gsm	320gsm

Chem-Tech® Chemical Splash Protective Clothing

Performance/Test Data							
Compliance or Certification		Chem-Tech		FRAS			
High Visibility AS4602.1999 High visibility safety garment EN471:2008 High visibility clothing for professional use		Certified compliant		Certified compliant			
Anti Static EN1149-1:1995 Surface Resistivity of Fabric test method		NA		Compliant 1.4 X 10 ⁹ Ohms			
Flame Resistance AS2755.1-1985 Textile fabrics - Burning behaviour Determination of ease of ignition of vertically oriented specimens		NA		No ignition			
Liquid Chemicals AS/NZS ISO 6530-2006 Protection Against Liquid Chemicals <i>This ISO internationally-recognised test performance method is a measurement of chemical penetration, absorption and repellency for chemical fabrics and materials.</i>							
Test Liquid	%	Penetration		Repellency		Absorption	
		Length	Width	Length	Width	Length	Width
Hydrochloric Acid	37	0.0	0.0	91.2%	90.7%	3.4	3.4
Sodium Hydroxide	40	0.0	0.0	98.4%	99.2%	0.46	0.5
Jet Fuel A1	100	0.0	0.0	75.6%	75.0%	16.2	18.1
Sulphuric Acid	98	0.0	0.0	96.3%	96.9%	4.0	3.83
Nitric Acid	50	0.0	0.0	91.7%	91.3%	4.6	4.6
AS3765.1:1990 Resistance to Liquid Penetration (General Purpose) Appendix A – AS3765.1 testing is terminated at 60min				Sulphuric Acid 98%(conc) Nitric Acid 40% Sodium Hydroxide 12.5M Toluene Tetrachloroethylene		>60 minutes >25 minutes >60 minutes >30 minutes >15 minutes	
GB12012-1989 <i>Further testing was completed to GB12012-1989 by a Certified Chinese Laboratory to determine extended resistanc times.</i>				Sulphuric Acid 98% Nitric Acid 40% Hydrochlic Acid 30%		>180 minutes >160 minutes >157 minutes	