

# Pyrolon™ - Advanced Secondary FR Protective Clothing

Pyrolon™ provides a unique and safe way to combine chemical protection and flame and heat protection, removing the risk of the flammability of standard chemical suits.

Unlike low cost SMS-based FR disposables which are polypropylene-based and maintain a tendency to **ignite, burn and drip molten plastic**, Pyrolon™ garments use a unique viscose-based fabric which is specifically designed to be flame resistant. In contact with flame it oxidises and disintegrates without igniting or propagating the flame. Once the flame is withdrawn combustion simply stops.

This makes Pyrolon™ fabrics ideal for secondary FR protection; coveralls providing protection against hazardous dusts and liquid chemicals when worn OVER primary FR (EN 11612) workwear (**commonly required in the petrochemical industry**) and WITHOUT compromising - in fact improving, total thermal protection.

Pyrolon™ garments offer a range of chemical protection from Type 6 to Type 3. All are certified to EN 14116 - Limited Flame Spread of materials and assemblies.

click on the images for more product details



**Pyrolon™ CRFR Cool Suit**

- EN 14116:2015 Index 1
- EN 1149-5 Anti-static
- EN 14605 Type 4

## Testing

EN 14116 requires testing of fabric and zip to an EN 15025 Vertical Flammability Test with minimum requirements as shown.

### EN 15025 - Vertical Flammability Test

A flame is applied to the centre\* of a fabric sample 200mm x 160mm for 10 seconds.

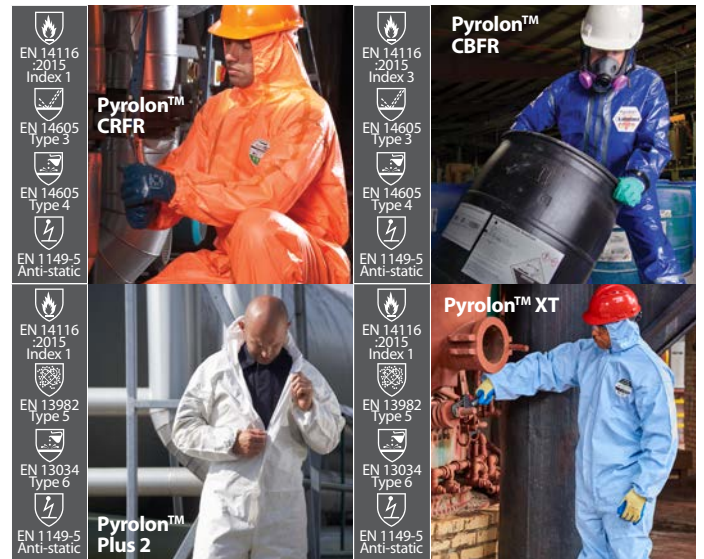
\* Procedure A. In procedure B the flame is applied to the bottom edge of the sample.



#### EN 14116:2015 Minimum Requirements (Index 1)

- Procedure A on the fabric and zip assembly
- No flame shall burn to any sample edge
- No burning or dripping debris
- No afterglow shall reach any sample edge
- Zipper should function after the test

Note: [The 2015 version of EN 14116 added the requirement for the test to be conducted on the fabric and zip fastening and that the zip should continue to function after the test. In the earlier version only the fabric was tested.](#)



- EN 14116:2015 Index 1
- EN 14605 Type 3
- EN 14605 Type 4
- EN 1149-5 Anti-static

- EN 14116:2015 Index 3
- EN 14605 Type 3
- EN 14605 Type 4
- EN 1149-5 Anti-static

- EN 14116:2015 Index 3
- EN 14605 Type 3
- EN 14605 Type 4
- EN 1149-5 Anti-static

- EN 14116:2015 Index 1
- EN 13982 Type 5
- EN 13034 Type 6
- EN 1149-5 Anti-static

- EN 14116:2015 Index 1
- EN 13982 Type 5
- EN 13034 Type 6
- EN 1149-5 Anti-static

- EN 14116:2015 Index 1
- EN 13982 Type 5
- EN 13034 Type 6
- EN 1149-5 Anti-static

### Pyrolon® Certification and Heat Resistance Performance

CHEMICAL PROTECTION EN CERTIFICATION			Pyrolon® Plus 2	Pyrolon® XT	Pyrolon® CRFR	Pyrolon® CRFR Cool Suit	Pyrolon® CBFR	Pyrolon® TPCR
<b>Chemical Hazards</b>								
EN Standard	CE Type	Description						
EN 13982	Type 5	Hazardous Dusts	●	●	●	●	N/A	N/A
EN 13605	Type 6	Light / Aerosol Liquid Spray	●	●	●	●	N/A	N/A
EN 14605	Type 4	Liquid Spray	No	No	No	●	●	●
EN 14605	Type 3	Liquid Jet Spray	No	No	No	No	●	●
EN 1073-2		Radioactive Contaminated Dust Protection	●	●	●	●	●	●
EN 1149-5		Anti-static (Surface Resistance / Charge Decay)	●	●	●	●	●	●
<b>Flame and Heat Hazards</b>								
EN Standard	CE Type	Description						
EN 14116 - Flames and Heat: Flammability	Index 1	No flame to reach outer edge of sample / no dripping / afterglow < 2sec	●	●	●	●	●	●
	Index 2	As above plus no hole formation > 5mm						
	Index 3	As above with afterflame < 2sec					●	
EN 11612 - Flames and Heat: Protection								●
<b>Heat Transfer Classes</b>								
EN Standard	CE Type	Description						
	Code B	Convective Heat	N/A	N/A	N/A	N/A	N/A	B1
	Code C	Radiant heat	N/A	N/A	N/A	N/A	N/A	C1
	Code D	Molten Aluminium	N/A	N/A	N/A	N/A	N/A	D1
	Code E	Molten Iron	N/A	N/A	N/A	N/A	N/A	E1
	Code F	Contact Heat	N/A	N/A	N/A	N/A	N/A	F1
EN 61482-1-2	Arc Flash	Box Method	N/A	N/A	N/A	N/A	N/A	●
EN 61482-1-1	Arc Flash	Fabric ATPV	N/A	N/A	N/A	N/A	N/A	21.9 cal/HRC²
EN 11611	Welding and Allied Processes	Clothing for protection in welding applications	N/A	N/A	N/A	N/A	N/A	●

All Pyrolon™ garments are certified to the latest 2015 version of **EN 14116 and according to the PPE Regulation 245 2016**

Full details of certification is shown in the table opposite.

All **CE Certificates** and **Declaration of Conformity** documents can be downloaded from the Lakeland website.

\* Pyrolon™ TPCR is a primary FR garment so is certified to EN 11612