



## Chemical and FR Protection

**Worn over primary FR garments to protect them from a broad range of chemicals and provide flash fire protection.**

PyroGuard CRFR™ garments meet NFPA 2113. Extends the life of the primary FR garment by helping to keep it clean. Self-extinguishing fabric does not melt or drip when ignited. Taped seams for added protection. Recommended applications include petro-chemical environments, manufacturing, industrial and oil/gas.

### Available Garments



**Coverall with Attached Respirator Hood, Elastic Wrist, Elastic Ankle & Taped Seams**

#9115T  
Size: Medium - 6XL  
6 per case



**Coverall with Attached Respirator Hood, Attached Boot, Elastic Wrist & Taped Seams**

#9119T  
Size: Medium - 6XL  
6 per case



- Proprietary bi-laminate fabric protects against flames and chemicals
- Elastic back stretches with user for more comfort and better tear resistance
- Storm flap over zipper adds an extra layer of protection
- Meets NFPA 2113 requirement for section 5.1.9



## PyroGuard CRFR™

TEST CONDUCTED	TEST METHOD	RESULTS
Grab/Tensile - Machine Direction	ASTM D1117 / D1682	34 lbs.
Grab/Tensile - Cross Direction	ASTM D1117 / D1682	27 lbs.
Bond Strength - Machine Direction	IST 110.2	197 gms
Bond Strength - Cross Direction	IST 110.2	223 gms
Mullen Burst	ASTM D3786-87	35 psi
Resistivity - Machine Direction	IST 70.1	2.9 x109 ohms
Resistivity - Cross Direction	IST 70.1	3.1 x109 ohms
Vertical Flammability	ASTM D6413	Pass
Char Length MD	ASTM D6413	4.7 in.
Char Length XD	ASTM D6413	4.5 in.
After Flame	ASTM F1930	<2.0 sec.
Thermal Protective Performance - Spaced	NFPA 1971 - 97	6.8 TPP
Thermal Mannequin Test % Body burn - Machine Direction	ASTM 1903 - 3.5 sec. Over Nomex IIIA garment 6.0 oz/yd <sup>2</sup> , Heat Flux = 2.0 CAL/cm <sup>2</sup>	25%

CHEMICAL	PENETRATION ASTM F903 TIME TO PENETRATE (MINUTES)	PERMEATION ASTM F739 NORMALIZED BREAKTHROUGH (MINUTES)
Acetone	>60	12
Acetonitrile 90%	>60	IMB
Acetaldehyde	>60	NT
Acrylonitrile	>60	NT
Benzene	>60	NT
Carbon Disulfide	>60	9
Crude Oil	>60	9
Dichloromethane	2	IMB
#1 Diesel	>60	15
Diethylamine	>60	IMB
Dimethylformamide	<1	IMB
Ethyl Acetate	>60	16
Ethylene Dichloride	>60	NT
Ethylene Oxide	>60	NT
Gasoline	>60	NT
Hexane	>60	>480
Hexamethylene Diisocyanate	>60	15
Hydrochloric Acid	>60	NT
JP-8	>60	NT
Jet Fuel A	>60	NT
Methanol	>60	IMB
Methyl Isobutyl Ketone	>60	NT
Methyl Mercaptan	>60	NT
Monochlorobenzene	>60	NT
Nitric Acid 70%	>60	129
Nitrobenzene	3	4
n-Butyl Acetate	>60	NT
Orthodichlorobenzene, Grade F	>60	NT
Para-Dichlorobenzene	>60	NT
Pentane	>60	NT
Phenol	>60	NT
Phosphoric Acid 85%	>60	>480
Sodium Hydroxide 40%	>60	>480
Styrene	>60	<1
Sulfuric Acid 96%	45	38
Tetrachlorethylene	>60	>480
Tetrahydrofuran	<1	<1
Toluene	>60	6
Trichlorobenzene Mixture	>60	NT
Xylene	>60	NT

