



ISO 9001:2008 Registered Manufacturer

Ultra C6

Material Content:	65% Oxidized Polyacrylonitrile (OPF)/ 35% artificial tri-blend
Material Construction:	1 x 1 Rib Knit
Material Weight:	6.5 oz / yd ² (+1 / -.5)
Material Color	Black (Standard)
Color Options Available	

FABRIC PERFORMANCE VALUES

THERMAL PROTECTIVE PERFORMANCE (TPP)		
	2 ply - as received	33.1 cal/cm ²
	2 ply - after 5 washes	
HOOD MATERIAL BURST STRENGTH		
		402 N
FLAME RESISTANCE TEST		
After Flame	as received	0 seconds
	after 5 washes	0 seconds
Char Length (wales x cour	as received	4 mm x 4 mm
	after 5 washes	3 mm x 3 mm
CLEANING SHRINKAGE RESISTANCE TEST		
Hood Measurement		0%
Face Opening Measurement		4%
HEAT AND THERMAL SHRINKAGE RESISTANCE TEST		
Hood Measurement	as received	0%
	after 5 washes	3%
Face Opening Measureme	as received	3%
	after 5 washes	5%
SEAM BREAKING STRENGTH TEST		
		573 N
MELT, DRIP, IGNITE, SEPARATE WHEN EXPOSED TO FLAME		
		None
ARC THERMAL PERFORMANCE VALUE (ATPV)		
	1 ply	10.6 cal/cm ² (HRC 2)
	2 ply	31.5 cal/cm ² (HRC 3)
HEAT ATTENUATION FACTOR (HAF)		
	1 ply	79.1%
	2 ply	92.1%

4th generation advanced CARBON technology

3 elements needed for fire = Oxygen, Heat, and Fuel

Without one element, a fire cannot start or continue

When exposed to flame, C6 fibers expand,

creating an Oxygen starved environment

so fire cannot continue. Material is self extinguishing

Inherently flame resistant (no harsh chemical treatments)

Odor neutralizing, Anti-Static, Low Heat Conductivity

Maintains performance values after laundering

Finished to minimize shrinkage

Rib knit allows for stretch and shape retention

Majestic Fire Apparel is a vertical manufacturer

Knitting our own fire retardant materials for over 16 years

We knit, cut, sew, and ship - all from our location in PA

MADE IN USA

NFPA 70E PERFORMANCE SPECIFICATIONS OF

ASTM F 1959/F 1959M-06a¹:

HRC Level 1 = minimum 5 cal/cm² to 7 cal/cm²

HRC Level 2 = minimum 8 cal/cm² to 24 cal/cm²

HRC Level 3 = minimum 25 cal/cm² to 39 cal/cm²

HRC Level 4 = minimum 40 cal/cm² and over

Meets CAL-OSHA Requirements
Passes Federal Test 191, Method 5903.2; CAL OSHA Sections 3406(d)
Complies with OSHA Rule 29 CFR Part 1910, 269

Fabric Performance Values in accordance with NFPA 1971-2013 test report dated 9/9/2014 performed by Underwriters Laboratories
ATPV and HAF values found in accordance with ASTM International Standard Test Method F1959-1999. Tests performed by Hugh Hoagland
all weights and measurements are approximate