



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 / yd² (+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-06ae1:
 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