Report # K-418925-1604P05-R00	Test Report
Samples Received: Mar-30-16 / Samples Tested: May-04-16	Kinectrics Inc., 800 Kipling Avenue, Unit 2 Toronto, Ontario, Canada Tel: 416-207-6000, www.kinectrics.com

Tested for

ArcWear
3018 Eastpoint Parkway
Louisville, KY 40223
502-333-0510

Contact information for item tested:

ITC International Textil Corporation S.A.
Juan Agustín García 1816
Ciudad Autónoma de Buenos Aires, (1416) Argentina
+541145880015

Test item description

ITC International Textil Corporation S.A.,
Style HiSafe 220, 6.5 oz/yd² 220 g/m² Twill,
48% Modacrylic 27% Viscose 15% ParaAramid, Navy,
AAD 6.5 oz/yd² 220 g/m²
ArcWear# 1604P05

Reference Standard

ASTM F1959/F1959M-14
Standard Test Method for Determining the Arc Rating of Materials for Clothing

Test Parameters:

Test current: 8 kA
Arc Gap: 30 cm
Distance to Fabric: 30 cm

Number of samples analysed: 24

Incident Energy Range: 6 to 10 cal/cm²

Arc Rating, ATPV = 8.0 Cal/cm²
Heat Attenuation Factor, HAF = 75%

No variations to standard method noted.
Samples tested as received, pre-test laundering as required by standard was arranged by client.

Test Summary

The Arc Rating of this material is intended for use as part of a flame resistant garment or system for workers exposed to electric arcs. The test result is applicable only to the test item as described; other fiber blends, weaves, finishing or dye may have different protection level. The test articles are tested as received; no test is done to validate the fiber content or composition. The Arc Rating was calculated based on the data obtained and analysed in accordance with the latest version of the applicable standards. The individual test sheets, graphs, photographs of the samples and video of every test are provided in digital format to the Client for review.

The arc testing performed to the above mentioned Standard is accredited by the Standards Council of Canada (SCC) to conform to the requirements of CAN-P-4E (ISO/IEC 17025:2005). Accreditation by the Standards Council of Canada (SCC) is a mark of competence and reliability recognized throughout the world.

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Note: The test performed does not apply to electrical contact or electrical shock hazard.

Prepared by:

Andrew Haines Date: 2016.05.04 15:40:29 -04'00'

Andrew Haines
HCL Technologist
Ph: 416-207-6000

Approved by:

Digitally signed by Kenneth Cheng
Date: 2016.05.14 00:22:06 -04'00'

Kenneth Cheng, M.Eng., P.Eng., MBA
Senior Engineer
Kinectrics Inc.

Note: For verification about results in this report, please forward copy of the report or inquiry to hcl@kinectrics.com

Date: May-04-16	Determination of ATPV by performing logistic regression on the panel burn response as indicated in Summary Table Test Performed in accordance with: ASTM F1959/F1959M-14
Report # K-418925-1604P05-R00	

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Fabric Description:

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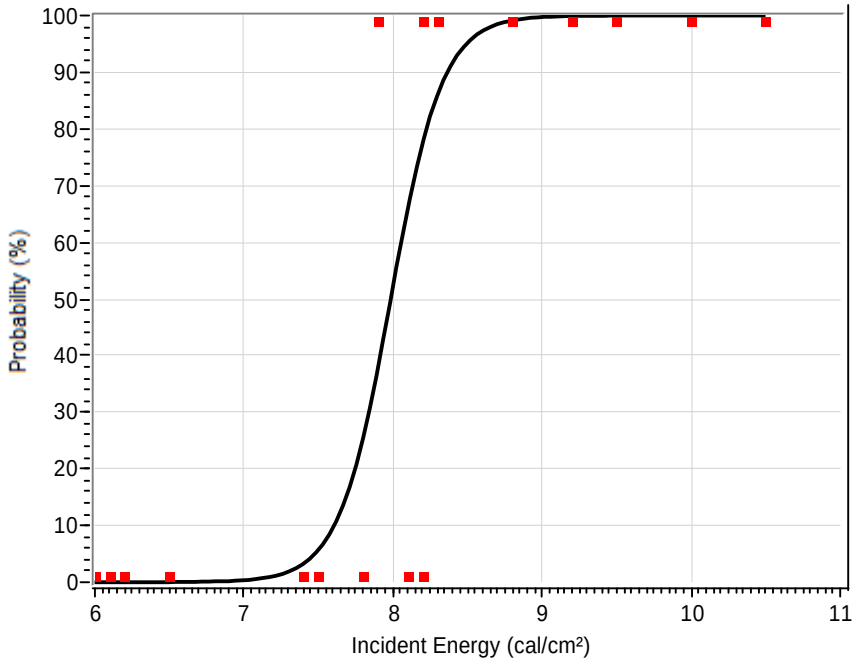
ArcWear# 1604P05

Determination of ATPV



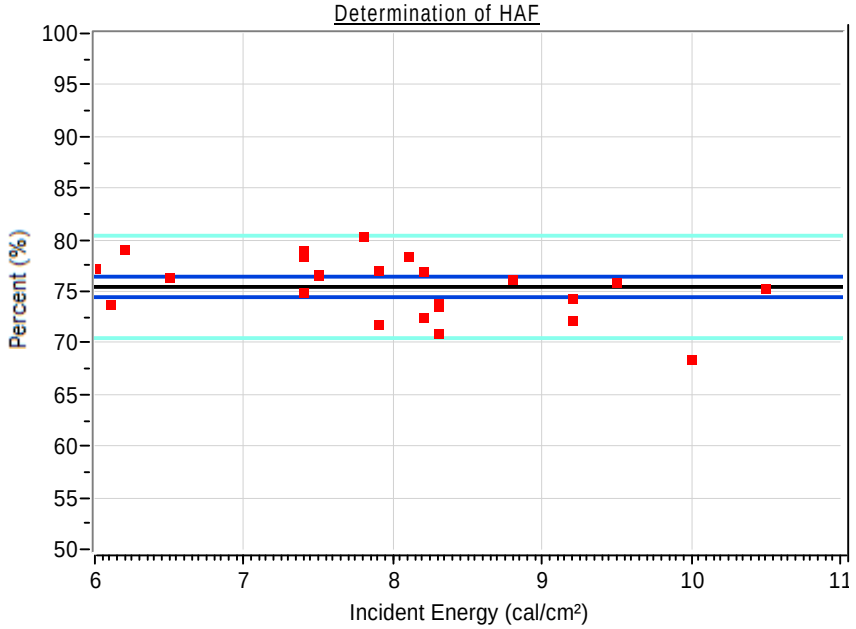
ATPV = 8.0 cal/cm²

Probability	Ei
5%	7.5
10%	7.6
20%	7.7
30%	7.8
40%	7.9
50%	8.0
60%	8.1
70%	8.1
80%	8.2
90%	8.4

(Note: ATPV is reported to nearest integer for ratings above 10 cal/cm²)

Total points analyzed = 24
Points above Stoll = 12
Points above mix zone = 10
Points below mix zone = 10
 # Pts within 20% = 19
 # Pts in mix zone = 3

Determination of HAF



HAF = 75 %

Confidence Intervals
95% CI = 74.0 , 76.0

Data pts
Best Fit
95% CI
95% CI pts

Date:
May-04-16

Report #
K-418925-1604P05-R00

Summary of Measured Energy and Observations

Test Performed in accordance with : ASTM F1959/F1959M-14

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ArcWear# 1604P05

	Test #	Panel	Test Current A	Cycles of 60Hz	Ei Cal/cm²	SCD Cal/cm²	HAF %	>Stoll Y/N	Break Open Y/N	Ablation Y/N	After Flame sec.	Omit Y/N	Comment
1	K-418925-2062	A	8194	11.2	9.2	0.4	74.3	Yes	-	-	-	No	
2	K-418925-2062	B	8194	11.2	10.5	0.6	75.3	Yes	-	-	-	No	
3	K-418925-2062	C	8194	11.2	10.0	1.2	68.4	Yes	-	-	-	No	
4	K-418925-2063	A	8277	9.2	8.1	-0.1	78.4	No	-	-	-	No	
5	K-418925-2063	B	8277	9.2	7.5	-0.1	76.6	No	-	-	-	No	
6	K-418925-2063	C	8277	9.2	8.8	0.2	76.2	Yes	-	-	-	No	
7	K-418925-2064	A	8271	8.2	6.1	-0.2	73.8	No	-	-	-	No	
8	K-418925-2064	B	8271	8.2	7.8	-0.3	80.4	No	-	-	-	No	
9	K-418925-2064	C	8271	8.2	6.0	-0.3	77.3	No	-	-	-	No	
10	K-418925-2065	A	8227	9.2	6.5	-0.3	76.4	No	-	-	-	No	
11	K-418925-2065	B	8227	9.2	6.2	-0.4	79.1	No	-	-	-	No	
12	K-418925-2065	C	8227	9.2	7.9	0.1	77.1	Yes	-	-	-	No	
13	K-418925-2066	A	8249	10.2	8.3	0.2	73.6	Yes	-	-	-	No	
14	K-418925-2066	B	8249	10.2	9.5	0.3	75.9	Yes	-	-	-	No	
15	K-418925-2066	C	8249	10.2	7.4	-0.4	78.4	No	-	-	-	No	
16	K-418925-2067	A	8241	9.7	8.2	0.2	72.5	Yes	-	-	-	No	
17	K-418925-2067	B	8241	9.7	7.4	-0.3	79.0	No	-	-	-	No	
18	K-418925-2067	C	8241	9.7	7.4	-0.1	74.9	No	-	-	-	No	
19	K-418925-2068	A	8217	9.7	7.5	-0.2	76.7	No	-	-	-	No	
20	K-418925-2068	B	8217	9.7	7.9	0.2	71.8	Yes	-	-	-	No	
21	K-418925-2068	C	8217	9.7	9.2	0.6	72.2	Yes	-	-	-	No	
22	K-418925-2069	A	8257	9.7	8.3	0.5	71.0	Yes	-	-	-	No	
23	K-418925-2069	B	8257	9.7	8.3	0.2	73.9	Yes	-	-	-	No	
24	K-418925-2069	C	8257	9.7	8.2	-0.1	77.0	No	-	-	-	No	
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No evidenece of afterflame or breakopen in samples tested.