

Report # K-418707-1406G03		Test Report Kinectrics Inc., 800 Kipling Avenue, Unit 2 Toronto, Ontario, Canada Tel: 416-207-6000, www.kinectrics.com 
Samples Received: June 17, 2014	Samples Tested: July 25, 2014	

<u>Tested for</u> Arcwear.com 502-333-0510 arctest@arcwear.com	<u>Contact information for item tested:</u> Showa Best Glove 579 Edison Street Menlo, GA 30731 706-862-6712
--	--

Test item description

Showa Best Glove Inc.,
Glove, Style Flash, Flame, & Cut (Sample A),
Fabric: Style FCC, Seamless Glove Knit, 33.3% Kevlar, 33.3% Fiberglass,
33.3% Modacrylic, with Air Infused Polychloroprene Dip Coating,
Thickness: Back min 1.0 mm, max 1.2 mm, average 1.1 mm, Palm min 1.6 mm, max 1.9 mm, average 1.7 mm,
ArcWear# 1406G03

Reference Standard

ASTM F2675 / F2675M - 13
Standard Test Method for Determining Arc Ratings of Hand Protective Products Developed and Used for Electrical Arc Flash Protection

<u>Test Parameters:</u> Test current: 8 kA Arc Gap: 30 cm Distance to Fabric: 30 cm	Number of samples analysed: 20 Incident Energy Range: 6 to 22 cal/cm²
--	---

Arc Rating, ATPV = 9.2 Cal/cm²

Heat Attenuation Factor, HAF = 72%

No variations to standard method noted.
Break-open Ebt not achieved or determined.
Samples tested as received, samples not laundered

Summary

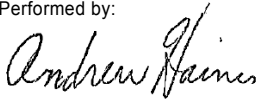
The Arc Rating of this material is intended for use as part of a flame resistant garment or system for workers exposed to electric arcs. The test result is applicable only to the test item as described; other fiber blends, weaves, finishing or dye may have different protection level. The test articles 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 done under Kinectrics Quality Management System registered to ISO 9001 :2008 by QMI-SAI Global (also accredited under ANAB).

Kinectrics Inc takes reasonable steps to ensure that all work performed shall meet the industry standards as set out in Kinectrics Inc.'s Quality Manual, and that all reports shall be reasonably free of errors, inaccuracies or omissions. KINECTRICS INC. DOES NOT MAKE ANY WARRANTY OR REPRESENTATION WHATSOEVER, EXPRESS OR IMPLIED, WITH RESPECT TO THE MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY INFORMATION CONTAINED IN THIS REPORT OR THE RESPECTIVE WORKS OR SERVICES SUPPLIED OR PERFORMED BY KINECTRICS INC. Kinectrics Inc. does not accept any liability for any damages, either directly, consequentially or otherwise resulting from the use of this report.

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

©Kinectrics. Partial reproduction of this report is strictly prohibited without the express written consent of Kinectrics Inc.

Performed by:  Andrew Haines Station Operator, HCL Ph: 416-207-6000	Approved by: Claude Maurice Test laboratory manager Kinectrics Inc.
--	---

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

Date:
July 25, 2014

Report #
K-418707-1406G03

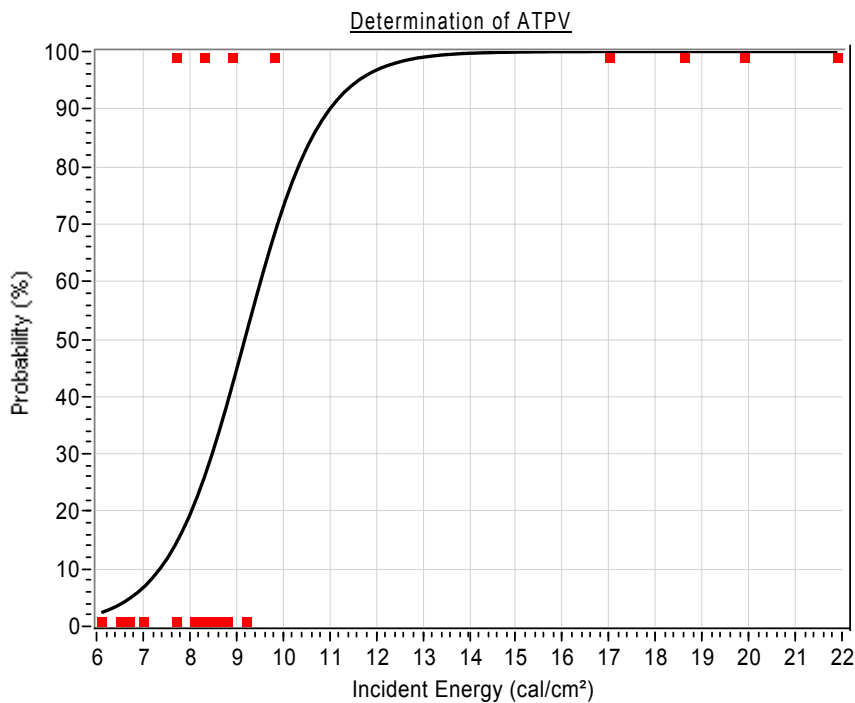
Determination of ATPV by performing logistic regression on the panel
burn response as indicated in Summary Table

Test Performed in accordance with: ASTM F2675 / F2675M - 13



Fabric Description:

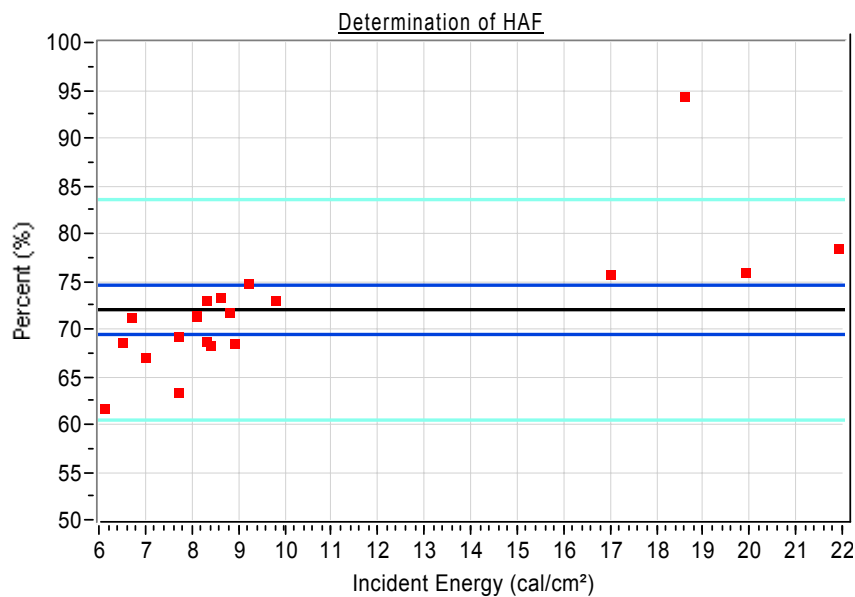
Showa Best Glove Inc.,
Glove, Style Flash, Flame, & Cut (Sample A),
Fabric: Style FCC, Seamless Glove Knit, 33.3% Kevlar, 33.3% Fiberglass,
33.3% Modacrylic, with Air Infused Polychloroprene Dip Coating,
Thickness: Back min 1.0 mm, max 1.2 mm, average 1.1 mm, Palm min 1.6 mm, max 1.9 mm, average 1.7 mm,
ArcWear# 1406G03



ATPV = 9.2 cal/cm²

Probability	Ei
5%	6.7
10%	7.4
20%	8.0
30%	8.5
40%	8.8
50%	9.2
60%	9.5
70%	9.9
80%	10.3
90%	11.0

Total points analyzed = 20
Points above Stoll = 8
Points above mix zone = 5
Points below mix zone = 4
Pts within 20% = 12
Pts in mix zone = 11



HAF = 72 %

Confidence Intervals
95% CI = 69.4 , 74.6

Data pts

Best Fit

95% CI

95% CI pts

Date:
July 25, 2014

Report #
K-418707-1406G03

Summary of Measured Energy and Observations
Test Performed in accordance with : ASTM F2675 / F2675M - 13



Fabric Description: Showa Best Glove Inc.,
Glove, Style Flash, Flame, & Cut (Sample A),
Fabric: Style FCC, Seamless Glove Knit, 33.3% Kevlar, 33.3% Fiberglass,
33.3% Modacrylic, with Air Infused Polychloroprene Dip Coating,
Thickness: Back min 1.0 mm, max 1.2 mm, average 1.1 mm, Palm min 1.6 mm, max 1.9 mm, average 1.7 mm,
ArcWear# 1406G03

	Test #	Panel	Test Current A	Cycles of 60Hz	Ei Cal/cm²	SCD Cal/cm²	HAF %	Burn Y/N	Break Open Y/N	Ablation Y/N	After Flame sec.	Omit Y/N	Comment
1	K-418707-4651	A	8255	10.2	8.4	-0.1	68.3	No	-	-	-	No	
2	K-418707-4651	B	8255	10.2	7.7	-0.2	69.2	No	-	-	-	No	
3	K-418707-4651	C	8255	10.2	8.6	-0.2	73.3	No	-	-	-	No	
4	K-418707-4651	D	8255	10.2	8.3	-0.4	73.0	No	-	-	-	No	
5	K-418707-4652	A	8212	11.2	8.1	-0.2	71.3	No	-	-	-	No	
6	K-418707-4652	B	8212	11.2	8.3	0.0	68.7	Yes	-	-	-	No	
7	K-418707-4652	C	8212	11.2	8.1	-0.1	71.4	No	-	-	-	No	
8	K-418707-4652	D	8212	11.2	7.7	0.3	63.4	Yes	-	-	-	No	
9	K-418707-4653	A	8238	12.2	9.2	-0.3	74.8	No	-	-	-	No	
10	K-418707-4653	B	8238	12.2	8.8	-0.1	71.8	No	-	-	-	No	
11	K-418707-4653	C	8238	12.2	9.8	0.1	73.0	Yes	-	-	-	No	
12	K-418707-4653	D	8238	12.2	8.9	0.3	68.5	Yes	-	-	-	No	
13	K-418707-4654	A	8303	9.2	6.7	-0.6	71.2	No	-	-	-	No	
14	K-418707-4654	B	8303	9.2	7.0	-0.1	67.1	No	-	-	-	No	
15	K-418707-4654	C	8303	9.2	6.5	-0.3	68.6	No	-	-	-	No	
16	K-418707-4654	D	8303	9.2	6.1	-0.1	61.7	No	-	-	-	No	
17	K-418707-4655	A	8074	25.2	21.9	2.1	78.5	Yes	-	-	-	No	
18	K-418707-4655	B	8074	25.2	19.9	2.3	75.9	Yes	-	-	-	No	
19	K-418707-4655	C	8074	25.2	18.6	-1.2	94.4	Yes	-	-	-	No	Glove turned palm forward for ignition test - no ignition
20	K-418707-4655	D	8074	25.2	17.0	1.5	75.7	Yes	-	-	-	No	
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													
31													
32													
33													
34													
35													
36													
37													
38													
39													

Page 3 of 3