Stern + Stern Stern + Stern industries, Inc. 188 Thacher Street Hornell, NY14843		Laboratory Report Phone: 607-324-4485 Fax: 607-324-6274	
Pattern Number: Chen	nStat [®] 919	Specification: ASTM F1506-01	
Nomex [®] Twill			
F1506-01 Parameters	<u>Requirements</u>	Initial Flammability results per ASTM D6413	
Char Length: Warp: Fill:	6.0 inch Max. 6.0 inch Max.	1.3 1.7	
Afterflame:	2.0 sec. Max.	none	
Afterglow:	allowed	1 to 2s	
Dripping:	None allowed	none	
		Results per ASTM F1959-99	

ATPv (Arc Thermal	report as	6.2
Performance value)	Cal/cm ²	0.3

All flammability testing was performed by Industrial Testing Laboratories, Mo. in accordance with ASTM D6413-99. Results are compared above to the requirements outlined in ASTM F1506-01, Table 1. Test results are on file, available on written request.

Based on the above test results, ChemStat[®]919 meets the requirements for initial flammability. Flammability after 25 washes/drycleaning was not performed. See statement below.

<u>Statement from DuPont Technical Guide for NOMEX® Brand Fiber 4/99</u> "Unlike flame-retardant treated (FRT) materials, NOMEX® brand fibers are inherently flame resistant (FR): the flame resistance is an inherent property of the polymer chemistry. It will not diminish during the life of the fiber."

Arc thermal Performance testing was performed by ArcWear.com in accordance with ASTM F1959-99.

Date: Oct. 25, 2002

Certified by: Stanley H. Cone

Stern & Stern Industries, Inc.

5.4 oz Chemstat 919 filament Nomex®

The following tests were performed on flat panels spaced 12 inches from the arc and an electrode spacing of 12 inches with a current of 8.05 kA rms. The tests were performed at Kinectrics Inc., High Current Lab in Toronto, Canada on Friday, October 25, 2002. The tests were performed and analyzed in accordance with ASTM F1959-99.



Heat Attenuation Factor vs Incident Energy



ATP Value(cal/cm²) = 6.3 ATPV 95% Confidence Interval = 6.1,6.6 Pts 95% Confidence Interval = 5.2,7.5



HAF (%) = 67.5

HAF 95% Confidence Interval = 65.4, 69.5 Pts 95% Confidence Interval = 58.3, 76.7

Thursday, October 24, 2002

5,4 oz Chemstat 919.fr1