

## Flammability of Clothing Textiles GLP Report

Test Article: Blox Respirator  
Lot # BLX-F36R-003  
Purchase Order: 00008713  
Study Number: 1404014-S01  
Study Received Date: 31 Mar 2021  
Testing Facility: Nelson Laboratories, LLC  
6280 S. Redwood Rd.  
Salt Lake City, UT 84123 U.S.A.  
Test Procedure(s): Standard Test Protocol (STP) Number: STP0073 Rev 07  
Deviation(s): None

**Summary:** This procedure was performed to evaluate the flammability of plain surface clothing textiles by measuring the ease of ignition and the speed of flame spread. The parameter of time is used to separate materials into different classes, thereby assisting in a judgment of fabric suitability for clothing and protective clothing material. The test procedure was performed in accordance with the test method outlined in 16 CFR Part 1610 (a) *Step 1 - testing in the original state*. *Step 2 - Refurbishing and testing after refurbishing*, was not performed. All test method acceptance criteria were met.

Test Article Side Tested: Outside  
Orientation: Machine

Test Criteria for Specimen Classification (See 16 CFR Part 1610.7):

Class	Plain Surface Textile Fabric
1	Burn time ≥3.5 seconds, IBE, or DNI
2	Not applicable to plain surface textile fabrics
3	Burn time <3.5 seconds

DNI = Test Article did not ignite  
IBE = Test Article ignited, but extinguished



Cameron Brierley electronically approved  
Study Director

Cameron Brierley

13 Apr 2021 18:05 (+00:00)  
Study Completion Date and Time

**Results:** Testing was performed on samples as they were received. If refurbishing is needed, it is up to the sponsor to provide appropriate samples for testing before and after refurbishing. The test articles submitted by the sponsor achieved a Class 1 flammability rating.

Replicate Number	Time of Flame Spread
1	DNI
2	DNI
3	DNI
4	DNI
5	DNI

**Test Method Acceptance Criteria:** Flame length must be approximately 16 mm (~5/8 in) from the flame tip to the opening in the gas nozzle.

**Procedure:** Test articles were prepared by cutting the material into approximately 50 x 150 mm swatches. Preliminary testing to establish the orientation and side of the test article to test was performed. The side and orientation that burned the fastest was used to test the test articles. Each test article was clamped into the specimen holder and placed in an oven maintained at 105 ± 3°C for 30 ± 2 minutes. The test articles were then placed in a desiccator for a minimum of 15 minutes prior to testing.

The flame length of the flammability tester was adjusted to approximately 16 mm prior to testing. Test articles were placed on the flammability rack and the stop cord was strung through the guides. The flammability timer was zeroed and testing was started. When the flame reached the stop cord, the timer stopped, and the results were recorded. Testing was terminated for test articles that did not exhibit flame spread beyond the initial application of the flame.

## Quality Assurance Statement

**Compliance Statement:** The test was conducted in accordance with the USFDA (21 CFR Parts 58, 210, 211, and 820) Regulations. This final report reflects the raw data.

Activity	Date
Study Initiation	02 Apr 2021
Phase Inspected by Quality Assurance: Preliminary Test	05 Apr 2021
Audit Results Reported to Study Director	05 Apr 2021
Audit Results Reported to Management	05 Apr 2021

Scientists	Title
Adrienne Sandall	Supervisor
Cameron Brierley	Study Director

**Data Disposition:** The study plan, raw data and final report from this study are archived at Nelson Laboratories, LLC or an approved off-site location.

Tayla Hall electronically approved  
Quality Assurance

13 Apr 2021 16:42 (+00:00)  
Date and Time