
**16 CFR Part 1632.6 Standard for the Flammability
of Mattresses and Mattress Pads on
"Item 28821 SoffTICK® TPU LDSC 9-10.8, Lot 521588"**

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1.0 ACCREDITATION To ISO/IEC 17025 for a defined Scope of Testing by the International Accreditation Service

2.0 SPECIFICATIONS OF ORDER

Determine resistance to cigarette ignition of a mattress pas prototype in accordance with 16 CFR Part 1632.6, *Standard for the Flammability of Mattresses and Mattress Pads - Ticking Substitution Procedure*", as per Vintex Inc. reference Purchase Order No. E802545 and Element Open Quotation No. 21-002-227456 dated January 15, 2021.

2.1 History of Report Revision

This is the original.

3.0 SAMPLE IDENTIFICATION (Element sample identification number 21-002-S0102-1)

Material described as, "Vinyl coated polyester fabric - general purpose Ticking 10.8 oz/yd²", and identified as: "Item 28821 SoffTICK® TPU LDSC 9-10.8, Lot 521588"

4.0 SUMMARY OF TEST PROCEDURE

The test method measures the ignition characteristics of ticking materials after exposure to lit, specified cigarette* ignition sources in a draft-free environment. Test specimen boxes are filled with the appropriate sublayer (foam and/or cotton felt) and the ticking material is then stretched over the sublayer(s) and secured to the sides of the specimen test box. Three lit cigarettes (only one burning at a time) are placed directly on the ticking surface inside pre-marked, specified template locations. Visual inspection of the damage is observed to determine if charring extended past the 1 inch (25 mm) marked area.

* Cigarettes Used: NIST Standard Reference material 1196a

5.0 SAMPLE PREPARATION

The sample was supplied in batch form, from which appropriate test specimens were sectioned. Specimens were conditioned at $50 \pm 5\%$ relative humidity and $23 \pm 3^\circ\text{C}$ for a minimum period of 48 hours prior to testing. Test specimens were individually removed from the conditioning chamber and immediately taken to the test room and tested. Testing was conducted on March 10, 2021. Conditions in the test room were measured at 22.6°C and 25% RH at the time of testing.

6.0 PERFORMANCE AND CLASSIFICATION REQUIREMENTS

6.1 Performance Requirements

The char length around each cigarette cannot be more than 1 inch (25.4 mm) in any direction from the cigarette. In addition, the base cotton felt cannot be ignited.

6.2 Classification Requirements

6.2.1 Class A Rating

The material must meet the criteria in 6.1 when tested directly over cotton felt.

6.2.2 Class B Rating

The material must meet the criteria in 6.1 when tested over ¼ inch (6.3 mm) urethane foam pad which is positioned between the test ticking and the cotton felt.

6.2.2 Class C Rating

For materials that fail to meet the requirements for Class A or Class B.

7.0 TEST RESULTS

16 CFR Part 1632.6

Flammability of Mattresses and Mattress Pads - Cigarette Test

Ticking Substitution Procedure

Sample: "Item 28821 SoffTICK® TPU LDSC 9-10.8, Lot 521588"

7.1 Class B Determination (placed over foam and cotton felt)

Specimen	Cigarette Location*	Charring or Melting Beyond 1 inch (25.4 mm)?	Ignition of Cotton Felt?	Result
1 - Cigarette #1	A	No	No	Pass
1 - Cigarette #2	A	No	No	Pass
1 - Cigarette #3	A	No	No	Pass
2 - Cigarette #1	A	No	No	Pass
2 - Cigarette #2	A	No	No	Pass
2 - Cigarette #3	A	No	No	Pass
3 - Cigarette #1	A	No	No	Pass
3 - Cigarette #2	A	No	No	Pass
3 - Cigarette #3	A	No	No	Pass

7.2 Class A Determination (placed directly over cotton felt)

Specimen	Cigarette Location*	Charring or Melting Beyond 1 inch (25.4 mm)?	Ignition of Cotton Felt?	Result
1 - Cigarette #1	A	No	No	Pass
1 - Cigarette #2	A	No	No	Pass
1 - Cigarette #3	A	No	No	Pass
2 - Cigarette #1	A	No	No	Pass
2 - Cigarette #2	A	No	No	Pass
2 - Cigarette #3	A	No	No	Pass
3 - Cigarette #1	A	No	No	Pass
3 - Cigarette #2	A	No	No	Pass
3 - Cigarette #3	A	No	No	Pass

* Cigarette Location

A - Most prominent part of the color and weave pattern design

B - Thread or depression created by the quilting process

8.0 CONCLUSIONS

The mattress ticking prototype material identified in this report meets the performance requirements of 16 CFR Part 1632.6(d)(2) and can therefore be classified as Class A or Class B.

9.0 MEASUREMENT UNCERTAINTY STATEMENT

16 CFR Part 1632.6 does not contain reporting instructions related to Measurement Uncertainty (MU). However, the performance criteria listed in the test method include binary responses (i.e. yes or no if ignition occurs, etc.). MU calculations cannot be performed on such data.

A handwritten signature in blue ink, appearing to read 'Robert A. Carleton'.

Robert A. Carleton,
Technician.

A handwritten signature in blue ink, appearing to read 'Ian Smith'.

Ian Smith,
Technical Manager.

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