

D3. Declaration of Conformity

Declaration of Conformity to ANSI/ISEA 107-2015, High-Visibility Safety Apparel

Certificate Number: J26172-2015

Company Name: Tingley Rubber Corporation

Address: 1551 S. Washington Ave Suite 403 Piscataway NJ 08854

Product Description: Bomber 3.1 Jacket, Fluorescent Yellow-Green

Model Number: J26172

Company declares that the above product meets all set requirements as stated in ANSI/ISEA 107-2015 as a compliant high-visibility safety item for Type R Performance Class 3. All relevant materials have been tested with documents referenced under this certificate number. This item meets all design requirements and has been measured for appropriate amount of visible reflective material and background materials for the smallest size offered for this product.

1. VISIBLE BACKGROUND MATERIAL:

- Amount of visible background material (smallest size offered): >.80m² (1240 in.²)

Please list each material that contributes towards the amount **VISIBLE BACKGROUND MATERIAL** listed above.

Material 1 Test Data

Test Lab: Vartest Labs	Material Type: <input type="checkbox"/> Knitted <input checked="" type="checkbox"/> Woven <input type="checkbox"/> Other:
Report #: TINGLE.020416E	Material Content (such as Polyester, Modacrylic, and others): PU on Polyester
Date: 2/23/16	Weight: 4.0 oz Color: Fl. Yellow-Green
Description: Interior Coated Polyurethane on 210D Woven Polyester with Exterior DWR Coating	

Material 2 Test Data

Test Lab:	Material Type: <input type="checkbox"/> Knitted <input type="checkbox"/> Woven <input type="checkbox"/> Other:
Report #:	Material Content (such as Polyester, Modacrylic, and others):
Date:	Weight: Color:
Description:	

Material 3 Test Data

Test Lab:	Material Type: <input type="checkbox"/> Knitted <input type="checkbox"/> Woven <input type="checkbox"/> Other:
Report #:	Material Content (such as Polyester, Modacrylic, and others):
Date:	Weight: Color:
Description:	

**Use separate sheet for additional materials*

Declaration of Conformity (page 2 of 2)

2. VISIBLE RETROREFLECTIVE MATERIAL

- Amount of visible retroreflective material (smallest size offered) .20m² (310 in.²)

Please list each type of material that contributes towards **VISIBLE RETROREFLECTIVE MATERIAL** listed above.

Material 1 Test Data

Test Lab: Calcoast – Test Report# 160613-04A	
Date: 7/12/2016	Style #: 1304-4
Description: 50mm wide sew on silver reflective trim	

Material 2 Test Data

Test Lab:	
Date:	Style #:
Description:	

**Use separate sheet for additional materials*

The undersigned hereby warrants that he/she is authorized to legally bind the company identified above.

Signed: _____ Title: _____

Print Name: _____ Date: _____

Third Party Certification
(ANSI/ISEA 107-2015)
HIGH VISIBILITY COMPLIANCE CERTIFICATE

Submitted by: Tingley Rubber Corporation
Name: Bomber II
Color Hi Vis Fluorescent Yellow Green

Date: February 23, 2016

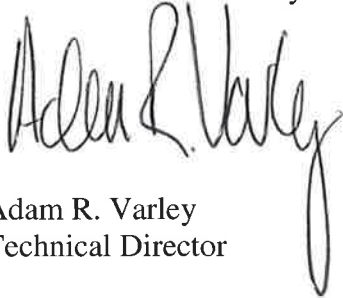
Report #: TINGLE.A020416E

The submitted fabric **MEETS** the requirements of ANSI/ISEA 107-2015 specification for the tests conducted in this report covering high visibility background material.

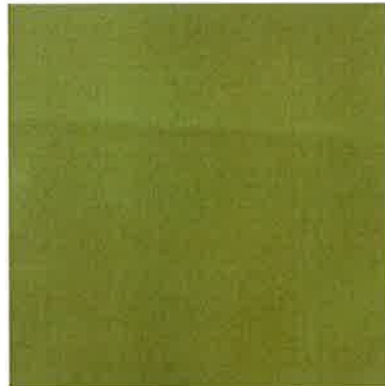
All of the above tests and evaluations were performed in accordance with ISO/IEC 17025 Quality Systems.

This certification applies to the background material only.

Certificate authorized by:



Adam R. Varley
Technical Director



Serial 60085020416E.TINGLE

*This certification applies to the particular sample tested and to the specific tests carried out as dated and detailed in the report referenced above. It does not signify any measure of approval, control, supervision, or surveillance by Vartest Laboratories Inc. to this or any related product.

ISO/IEC 17025 Certified Third Party Test Report

DATE: February 26, 2016 **FILE:** TINGLE.A020416E
PO #: 17115

CLIENT: Tingley Rubber Corporation **ATTN:** Erika Puello
1551 S Washington Ave, Suite 403
Piscataway, NJ 08854

SAMPLE IDENTIFIED BY CLIENT AS:

Fabric Submitted
Per ANSI/ISEA 107-2015 Specification
Name: Bomber II
Color Hi Vis Fluorescent Yellow Green

EXECUTIVE SUMMARY:

PASS

FAIL

X

The submitted fabric **MEETS** the requirements of ANSI/ISEA 107-2015 Specification for the applicable tests conducted in this report covering high visibility background material.

REQUIRED TESTS:

Test/Method	Section	ANSI/ISEA 107 REQUIREMENTS	TEST RESULT	PASS/FAIL/NA
Determination of Color ASTM E1164-12 (Single layer)	8.1.1 8.2.4 10.2	Test specimen must fulfill the colorimetric requirements of Table 3 for background material	As submitted: x = y = % Y =	N/A
			After 40x Xenon x = y = % Y =	N/A
Determination of Color ASTM E1164-12 (Two layers of the same material)	8.1.1 8.2.4 10.2	Test specimen must fulfill the colorimetric requirements of Table 3 for background material	As submitted: x = 0.372 y = 0.548 % Y = 118.99	PASS
			After 40x Xenon x = 0.372 y = 0.540 % Y = 114.04	PASS
Colorfastness Crocking AATCC 8-2013	8.2.1	Wet 3.0 Dry 3.0	Wet: 5.0 Dry: 5.0	PASS PASS
Colorfastness Perspiration AATCC 15-2013	8.2.2	Shade change 4.0 Staining 3.0	Shade Change: 5.0 Acetate: 4.5 Cotton: 5.0 Nylon: 4.5 Polyester: 5.0 Acrylic: 5.0 Wool: 5.0	PASS PASS

ISO/IEC 17025 Certified Third Party Test Report

FILE: TINGLE.A020416E

PO #: 17115

SAMPLE IDENTIFIED BY CLIENT AS:

Fabric Submitted
Per ANSI/ISEA 107-2015 Specification
Name: Bomber II
Color Hi Vis Fluorescent Yellow Green

REQUIRED TESTS (Cont.):

Test/Method	Section	ANSI/ISEA 107 REQUIREMENTS	TEST RESULT	PASS/FAIL/NA
Bursting Strength (Knitted or Other Nonwovens) ASTM D6797-07 (2011)	8.4.1	267 N (60 lbf) (27.2fkg)		N/A
Tear Resistance (Woven) ASTM D1424-09 (2013)	8.4.2	13 N (1326 gf) (2.92 lbf) Avg. force machine Avg. force cross-machine	4.10 lbs average 4.69 lbs average	PASS PASS

TESTED AS CARE LABEL DICTATES:

Test/Method	Section	ANSI/ISEA 107 REQUIREMENTS	TEST RESULT	PASS/FAIL/NA
Colorfastness Domestic Laundry AATCC 61-2013-2A 105°F (Modified)	8.2.3 Table 4	Shade Change 4.5 Staining 3.0	Shade Change: 4.5 Acetate: 4.5 Cotton: 5.0 Nylon: 4.5 Polyester: 5.0 Acrylic: 5.0 Wool: 4.5	PASS PASS
Colorfastness Commercial Laundry AATCC 61-2013-3A 145°F (Modified)	8.2.3 Table 4	Shade Change 4.5 Staining 3.0	Shade Change: Acetate: Cotton: Nylon: Polyester: Acrylic: Wool:	N/A N/A
Colorfastness Water AATCC 107-2013	8.2.3 Table 4	Shade Change 3.0 3.0	Shade Change: 5.0 Acetate: 4.5 Cotton: 5.0 Nylon: 4.5 Polyester: 5.0 Acrylic: 5.0 Wool: 5.0	PASS PASS
Colorfastness Hypochlorite Bleaching AATCC 61-2013-4A (Commercial)	8.2.3 Table 4	Fading 4.0		N/A
Colorfastness Hypochlorite Bleaching AATCC 61-2013-5A (Domestic)	8.2.3 Table 4	Fading 4.0		N/A

ISO/IEC 17025 Certified Third Party Test Report

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PO #: 17115

SAMPLE IDENTIFIED BY CLIENT AS:

Fabric Submitted

Per ANSI/ISEA 107-2015 Specification

Name: Bomber II

Color Hi Vis Fluorescent Yellow Green

TESTED AS CARE LABEL DICTATES:

Test/Method	Section	ANSI/ISEA 107 REQUIREMENTS	TEST RESULT	PASS/FAIL/NA
Colorfastness Hot-pressing AATCC 133-2013	8.2.3 Table 4	Shade Change: 4.5 Staining: 3.0	230°F Shade Change: Staining: 300°F	N/A
			Shade Change: Staining: 390°F	N/A
			Shade Change: Staining:	N/A
Colorfastness Dry Cleaning AATCC 132-2013	8.2.3 Table 4	Shade Change 4.0		N/A
Dimensional change Domestic AATCC 135-2012 (3)IIIA(ii) @ 105°F	8.3.1	Woven L +/- 4% W +/-2%	5th Cycle Length= -0.3% Width = -0.3%	PASS
		Knit or Coated, Non-Woven	5th Cycle Length= Width =	N/A

TESTED AS CARE LABEL DICTATES (cont.):

Test/Method	Section	ANSI/ISEA 107 REQUIREMENTS	TEST RESULT	PASS/FAIL/NA
Dimensional change Commercial AATCC 96-2012 IIIC-A and/or E@145°F	8.3.1	Woven L +/- 4% W +/-2%	5th Cycle Length= Width =	N/A
		Knit or Coated, Non-Woven L +/- 7% W +/-5%	5th Cycle Length= Width =	N/A
Dimensional change Drycleaning AATCC 158-2011	8.3.1	Woven L +/- 4% W +/-2%	5th Cycle Length= Width =	N/A
		Knit or Coated, Non-Woven L +/- 7% W +/-5%	5th Cycle Length= Width =	N/A

ISO/IEC 17025 Certified Third Party Test Report

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PO #: 17115

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Fabric Submitted
Per ANSI/ISEA 107-2015 Specification
Name: Bomber II
Color Hi Vis Fluorescent Yellow Green

TESTED AS CARE LABEL DICTATES (cont.):

Test/Method	Section	ANSI/ISEA 107 REQUIREMENTS	TEST RESULT	PASS/FAIL/NA
Water Repellency AATCC 22-2010	8.5.1	90 New 70 After 5X Launderings	New: After:	N/A N/A
Water Resistance AATCC 35-2013	8.5.2	≤ 1 g of water penetration Level 1	New: After 5X Launderings:	N/A N/A
Waterproof AATCC 127-2013	8.5.3	200 cm New 200 cm After 5X Launderings	New: After:	N/A N/A
Breathability ASTM E96-2013 Procedure B or BW	8.6	Procedure B: 600 g/m ² /24 hr microporous		N/A
		Procedure BW: 3600 g/m ² /24 hr hydrophilic		N/A

Signed For The Company By

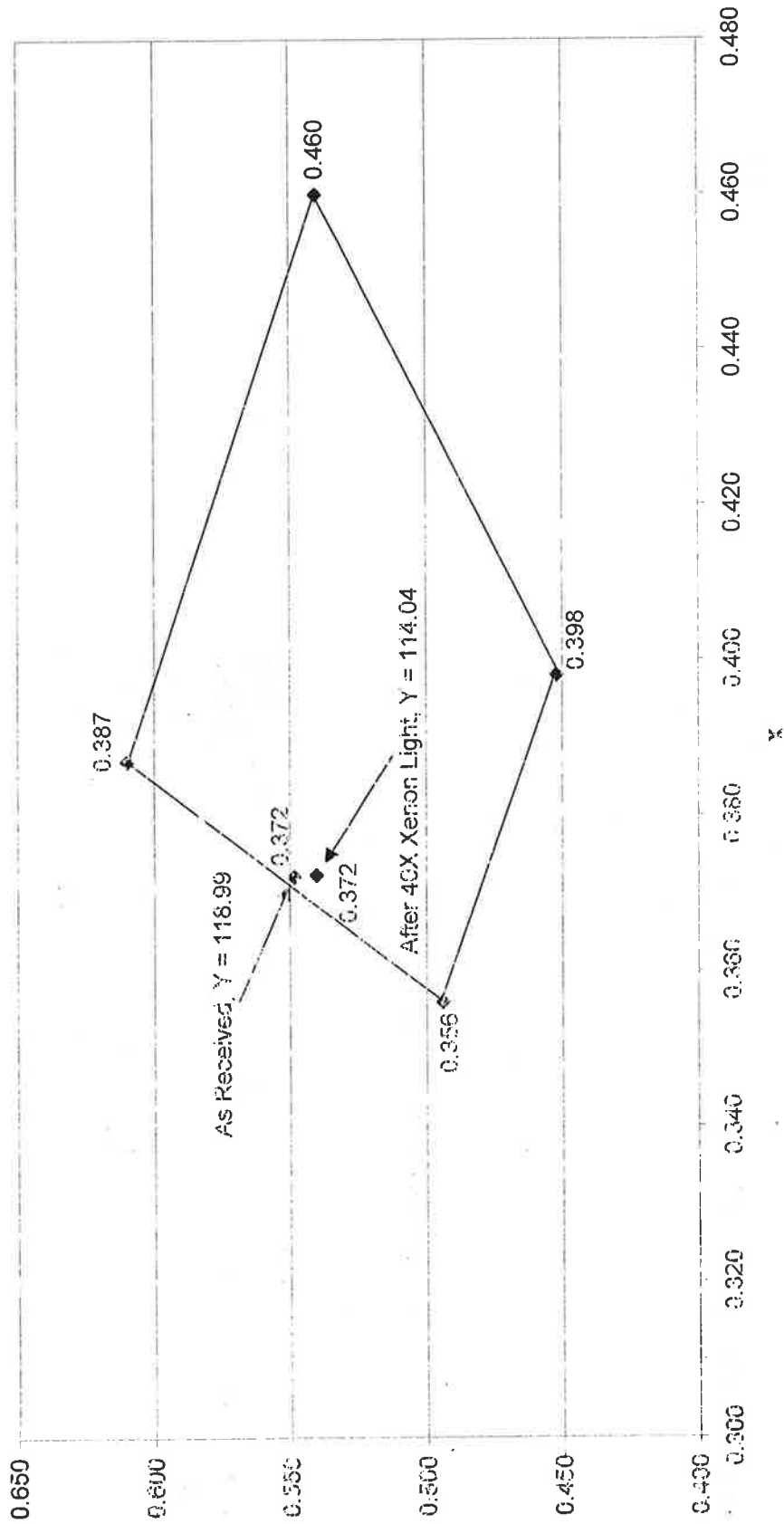
Adam R. Varley
Technical Director

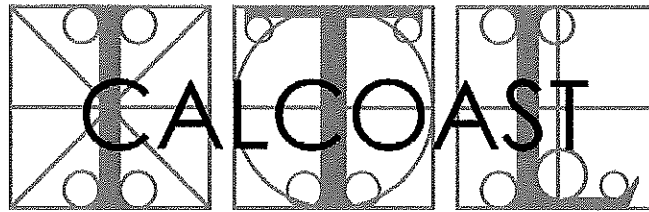
JG/02/204



Stacy Sadowy
Quality Assurance Supervisor

Chromaticity Coordinates
TINCLE.A.020416E
Fluorescent Yellow-Green
ANSI 107-2015 Requirement: $Y \geq 70$
Test Performed with Double Layers of Fabric





INDUSTRIAL TESTING LABORATORY

CERTIFICATE OF COMPLIANCE

Based on Report No. 160613-04A

Report Date: 12 July 2016

Project Name: Tingley N-FR Sew-on Chinastars 1303-4; T/C base [non-waterproof] reflective trim

Submitted by: Tingley Rubber Corporation South Plainfield, NJ 07080

Test Laboratory: Calcoast - ITL San Leandro, CA 94577

Product: 50 mm wide silver retroreflective trim, submitted 13 June 2016

SUMMARY

Specification: ANSI/ISEA 107-2015

American National Standard for High-Visibility Safety Apparel Retroreflective and Combined Performance Material

Color, Combined Performance Material

Prior to Exposure..... Not Applicable

Colorfastness..... Not Applicable

Retroreflective Performance Prior to Test Exposure Passed

Retroreflective Performance after Test Exposure

Abrasion..... Passed

Flexing..... Passed

Folding at Cold Temperatures..... Passed

Exposure to Temperature Variation..... Passed

Washing (25X)..... Passed

Dry-cleaning (0X)..... Not Tested

Retroreflective Performance in Rainfall..... Passed

Written by:

[Signature of Douglas G. Cummins]

Douglas G. Cummins Photometric Engineer

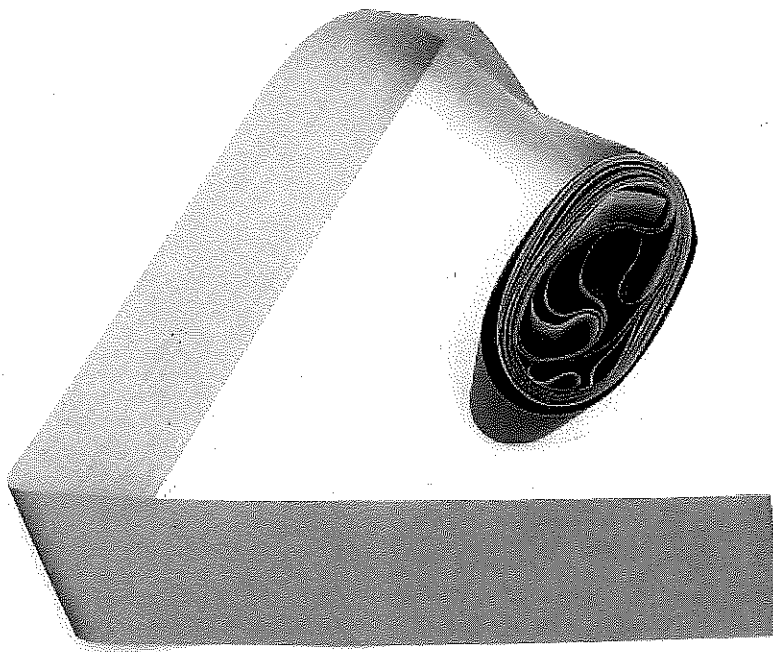
Approved by:

[Signature of Mark A. Evans]

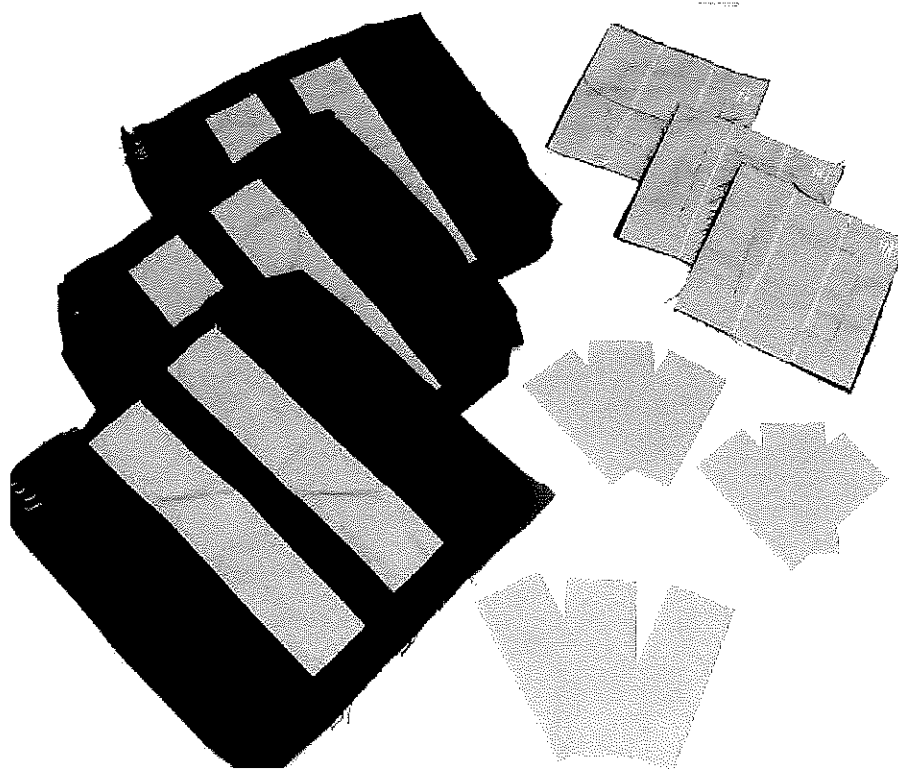
Mark A. Evans Laboratory Director

PHOTOGRAPH SHEET

Project Name: Tingley N-FR Sew-on Chinastars 1303-4; T/C base
[non-waterproof] reflective trim



Roll, as received



Test Samples