

Test Report

No. SHSL1203039474TX

Date: Mar 19, 2012

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VICSA SAFETY S.A.
PINTOR CICARELLI NO 683, SAN JOAQUIN, SANTIAGO, CHILE

The following sample(s) was/were submitted and identified on behalf of the client as:

Sample Description : Knitted Fabric: Spandex In Orange
Style No. : Multifunctional Headwear

Test Performed : Selected test(s) as requested by applicant
* * * * *
Sample Receiving Date : Mar 15, 2012
Testing Period : Mar 15, 2012 TO Mar 19, 2012
Test Result(s) : For further details, please refer to the following page(s).

Signed for and on behalf of
SGS-CSTC Ltd.



Tina Xi
Account Executive

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Test Result

Ultraviolet Protection Factor

(AATCC 183:2010)

As received

Sample	<u>Dry evaluation</u>	<u>Wet evaluation</u>
Ultraviolet Protection Factor (UPF) :	216	181
Standard Deviation :	59.5	57.6
Rated UPF :	50+	50+
Protection Category :	Excellent	Excellent
Percent Transmittance, T (UV-A) :	1.04	1.47
Percent Transmittance, T (UV-B) :	0.36	0.38
The Percent Blocking, UV-A :	98.96	98.53
The Percent Blocking, UV-B :	99.64	99.62

Test was conducted in wavelength range : 280 – 400 nm

Instrument : UV – Vis Spectrophotometer model

No. of Scans : 6

Remarks :

(1) Ultraviolet Protection Factor (UPF) is the ratio of the average effective ultraviolet radiation (UV-R) irradiance transmitted and calculated through air to the average effective UV-R irradiance transmitted and calculated through fabric.

(2) The limits of the spectral range of ultraviolet radiation are not well defined and may vary according to the user. Committee E-2.12 of the International Commission on Illumination (CIE) distinguishes in the spectral range between 400 and 100 nm :

UV-A : 315 – 400 nm

UV-B : 280 – 315 nm

UV-R : 280 – 400 nm

(3) This method can also be used to determine the UPF of wet and/or stretched fabrics. However, the techniques for wetting and/or stretching the specimens are not part of this method and are addressed in a separate test procedure. It must be noted that wetting and/or stretching the specimens could change the UPF properties.

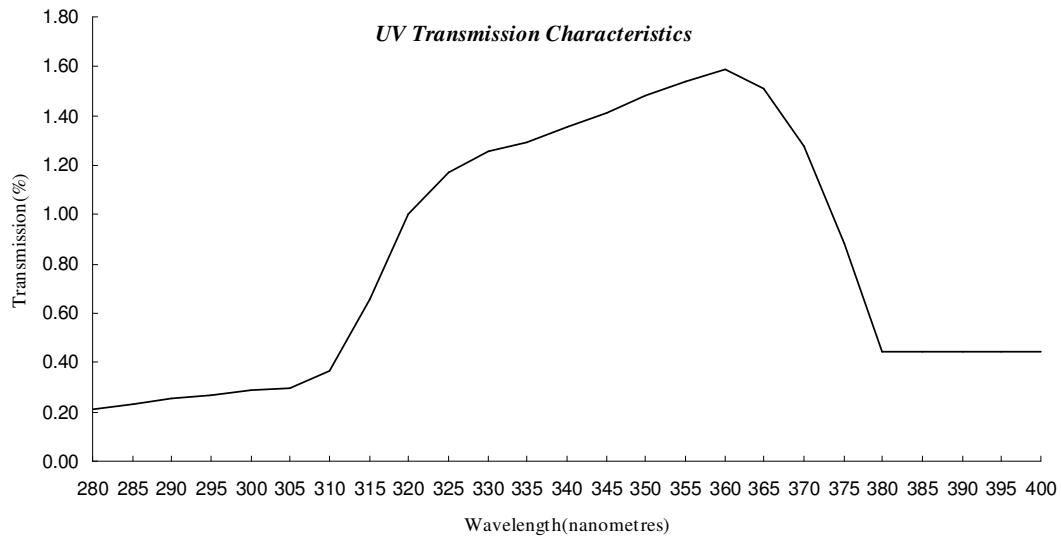
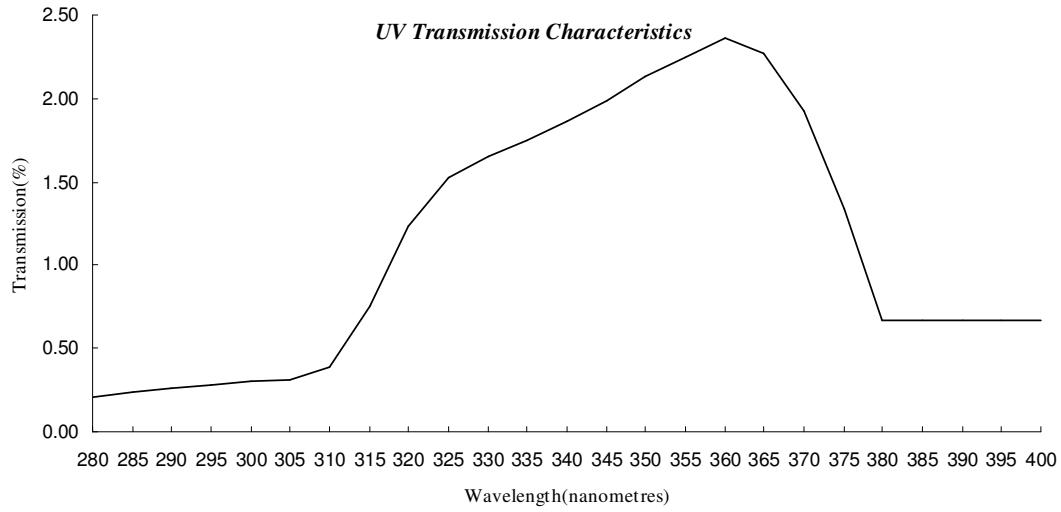
(4) Refer to ASTM D6603, The UV protection category is determined the UPF values,

UPF 40 or greater	Excellent UV protection
UPF in between 25 to 39	Very Good UV Protection
UPF is between 15 to 24	Good UV protection
UPF less than 15	Unclassification

(5) The listed protection category is for reference only, the market claims for labeling UV-Protection product shall follow “Standard Guide For Labeling UV-Protection Textiles” as stated in ASTM D6603-00.

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Wet Evaluation**Dry Evaluation******* End of Report *****

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