



**Test Report**

No: TX52451 /2008 /SH

Date: JUNE 11, 2008

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COLOTEX INDUSTRIAL CO., LTD.  
5F, NO.13, LANE 35, JIHU ROAD,  
NEIHU 114, TAIPEI, TAIWAN, R.O.C.

The following sample was submitted and identified by the client as:

SAMPLE DESCRIPTION: ONE SAMPLE OF KNITTED FABRIC X-300 55% SU-PIMA COTTON  
45% POLYESTER (X-ODOR) PIQUE-JERSEY, 70" X 260g/y (155G/SQM)  
X-DOOR JERSEY IN GREY

STYLE NO.: X-300

BUYER:

MANUFACTURER/VENDOR: COLOTEX INDUSTRIAL CO., LTD.

COUNTRY OF ORIGIN: TAIWAN

SAMPLE RECEIVING DATE: MAY 30, 2008

TEST STARTING DATE: MAY 30, 2008

Test Performed: Selected test(s) as requested by applicant.

Test Results: For further details, please refer to the following page(s).

**Signed for and on behalf of  
SGS Taiwan Ltd.**

**Wu Shu Yi, Jessica**

**Asst. Supervisor**

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Test Results:

1. Antibacterial Finishes on Textile Materials (AATCC 100)

After 5 washing\* (Back side)

TEST BACTERIA : Staphylococcus aureus ATCC No. 6538

TEST ITEM	Counts At "0 Hr"	Counts At "24hr"	REDUCTION (R%)
	Contact Time (CFU/Diameter 4.8cm x 4 piece)	Contact Time (CFU/Diameter 4.8cm x 4 piece)	
NEGATIVE CONTROL SPECIMEN	1.1×10 <sup>5</sup>	1.3×10 <sup>7</sup>	—
TEST SPECIMEN	1.2×10 <sup>5</sup>	< 1.0×10 <sup>2</sup>	99.9

TEST BACTERIA : Klebsiella pneumoniae ATCC No. 4352

TEST ITEM	Counts At "0 Hr"	Counts At "24hr"	REDUCTION (R%)
	Contact Time (CFU/Diameter 4.8cm x 4 piece)	Contact Time (CFU/Diameter 4.8cm x 4 piece)	
NEGATIVE CONTROL SPECIMEN	1.2×10 <sup>5</sup>	3.6×10 <sup>8</sup>	—
TEST SPECIMEN	1.2×10 <sup>5</sup>	< 1.0×10 <sup>2</sup>	99.9

NOTE: Reduction(%) = (Counts At "0 Hr" Contact Time - Counts At "24hr" Contact Time) / Counts At "0 Hr" Contact Time × 100

The test was subcontracted to other SGS Laboratory.

\*Washing condition : AATCC 135 2004 - (1) IIIA - Machine wash at 105±5°F - using 1993 AATCC Standard Reference Detergent - normal cycle - tumble dry low - 5 cycles.

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Test Results:

2. Antibacterial Finishes on Textile Materials (AATCC 100)

After 25 washing\* (Back side)

TEST BACTERIA : Staphylococcus aureus ATCC No. 6538

TEST ITEM	Counts At "0 Hr"	Counts At "24hr"	REDUCTION (R%)
	Contact Time (CFU/Diameter 4.8cm x 4 piece)	Contact Time (CFU/Diameter 4.8cm x 4 piece)	
NEGATIVE CONTROL SPECIMEN	1.1×10 <sup>5</sup>	1.3×10 <sup>7</sup>	—
TEST SPECIMEN	1.3×10 <sup>5</sup>	<1.0×10 <sup>2</sup>	99.9

TEST BACTERIA : Klebsiella pneumoniae ATCC No. 4352

TEST ITEM	Counts At "0 Hr"	Counts At "24hr"	REDUCTION (R%)
	Contact Time (CFU/Diameter 4.8cm x 4 piece)	Contact Time (CFU/Diameter 4.8cm x 4 piece)	
NEGATIVE CONTROL SPECIMEN	1.2×10 <sup>5</sup>	3.6×10 <sup>8</sup>	—
TEST SPECIMEN	1.1×10 <sup>5</sup>	<1.0×10 <sup>2</sup>	99.9

NOTE: Reduction(%) = (Counts At "0 Hr" Contact Time - Counts At "24hr" Contact Time) / Counts At "0 Hr" Contact Time × 100

The test was subcontracted to other SGS Laboratory.

\*Washing condition : AATCC 135 2004 - (1) IIIA - Machine wash at 105±5°F - using 1993 AATCC Standard Reference Detergent - normal cycle - tumble dry low - 25 cycles.

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## Test Results:

### 3. Transmittance or Blocking of Erythemally Weighted Ultraviolet Radiation through Fabrics (AATCC 183-2004)(As received)

After 25 washing\* (Face side)

	<u>Dry Evaluation</u>	<u>Wet Evaluation</u>
Ultraviolet Protection Factor (UPF) :	184	218
Standard Deviation :	13	19
Rated UPF :	50+	50+
Protection Category :	Excellent	Excellent
Percent Transmittance, T (UV-A) :	0.94	0.93
Percent Transmittance, T (UV-B) :	0.43	0.32
The Percent Blocking, UV-A :	99.06	99.07
The Percent Blocking, UV-B :	99.57	99.68

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.

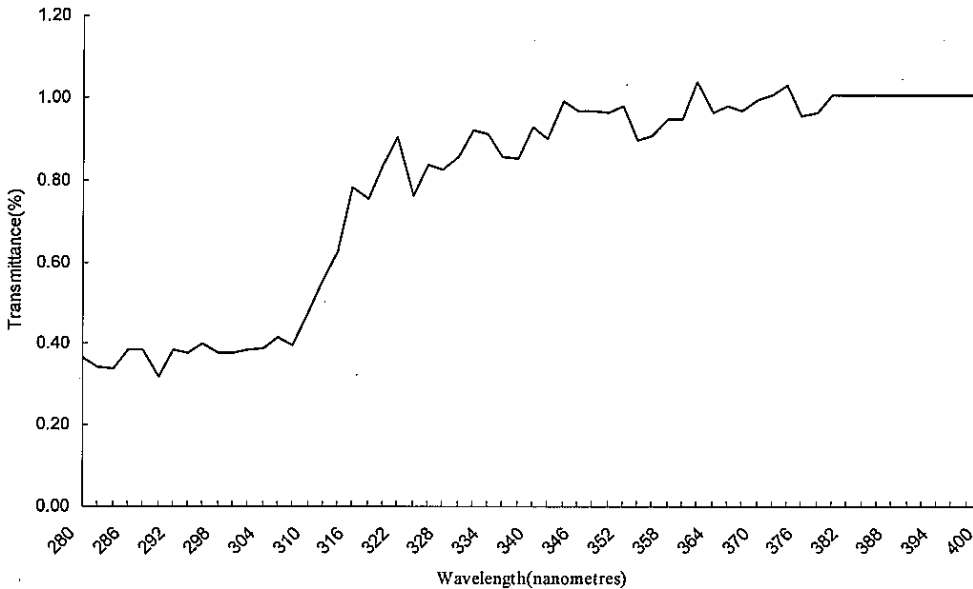
Note : Graph Appendix is attached

The test was subcontracted to other SGS Laboratory.

\*Washing condition : AATCC 135 2004 - (1) IIIA - Machine wash at 105±5°F  
- using 1993 AATCC Standard Reference Detergent  
- normal cycle - tumble dry low - 25 cycles.

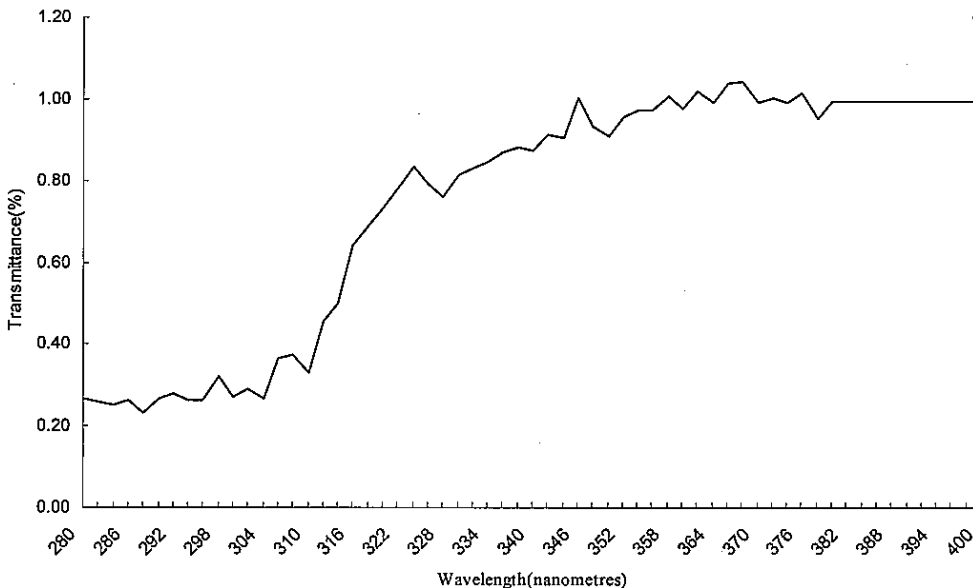
Dry Evaluation :

UV Transmittance Through Fabrics



Wet Evaluation :

UV Transmittance Through Fabrics



\*\*\* End of Report \*\*\*

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TW 6456861