TEST REPORT

Technical Report: (9620)178-0403

Bureau Veritas CPS Vietnam Limited
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TEST REPORT

IMPULSE FASHION VIETNAM GARMENT EXPORTING LIMITED COMPANY
1482 TINH LO 8 STREET, TAN THANH DONG VILLAGE, CU CHI DISTRICT, HCM CITY

ATTN: ANA

LAB NO.: (9620)178-0403

FORM NO.: /
DATE IN: JUN 26, 2020
MODIFIED DATE IN: /
DATE OUT: JUN 30, 2020
BUYER: /
NO. OF WORKING DAYS: 4

OVERALL RATING **PASS LEVEL 1**

Vendor:	IMPULSE FASHION VIETNAM GARMENT EXPORTING LIMITED COMPANY	**Agent:**	/
Fabric Supplier/Mill:	/	**Factory/ Manufacturer:**	/
P.O. No.:	/	**Style No.:**	/
Sample Description:	GOWN, SS QUALITY, PP+PE (LEISHI'S FABRIC)		
Color:	BLUE	**Country of Destination:**	US & EU MARKET
Claimed Fabric Weight:	40 GSM	**Claimed Fabric Count:**	/

Product Category	GOWN
Test Requested	FULL PACKAGE
Previous Report No.	/

Submitted Fiber Content	/
Actual Fiber Content	/
Suggested Fiber Content	/
Submitted Care Instruction(s)	/
Client Expected Care Instruction	/
Suggested Care Instruction(s)	/

TEST PROPERTY	COMMENTS
WATER RESISTANCE: HYDROSTATIC PRESSURE TEST	DATA
WATER RESISTANCE: IMPACT PENETRATION TEST	PASS
WATER REPELLENCY: SPRAY TEST	DATA
WATER VAPOR TRANSMISSION OF MATERIALS	DATA
BREAKING STRENGTH OF TEXTILE FABRICS: GRAB TEST	FAIL
TEARING STRENGTH: TRAPEZOID	PASS
FAILURE IN SEWN SEAMS: WOVEN FABRICS	FAIL
FABRIC WEIGHT	DATA
FLAMMABILITY OF CLOTHING TEXTILES	PASS
FORMALDEHYDE CONTENT TEST	PASS
pH VALUE	PASS
EXTRACTABLE HEAVY METALS	PASS
TOTAL LEAD IN SUBSTRATE	PASS
PHTHALATE TEST	PASS
AZO DYES IN TEXTILE AND LEATHER	PASS

REMARK: The sample **meets** the **LEVEL 1** requirement for ANSI/AAMI PB70.

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BUREAU VERITAS CPS VIETNAM LTD.

MANDY TRUONG
LAB MANAGER - SOFTLINES

C/N

BUREAU VERITAS

TEST RESULTS

TEST PROPERTY		REQUIREMENTS
WATER RESISTANCE: HYDROSTATIC PRESSURE TEST(AATCC 127-18)		LEVEL 2: MIN. 20 cmH2O LEVEL 3: MIN. 50 cmH2O
(cm H2O)		
FABRIC		
FRONT AREA	> 100	
BACK AREA	> 100	
SLEEVE AREA	> 100	
SEAM		
SLEEVE SEAM	7.2 CMWS* (WATER LEAKAGE OUT AT SEAM)	
TIE ATTACHMENT	19.2 CMWS* (WATER LEAKAGE OUT AT SEAM)	
WATER RESISTANCE: IMPACT PENETRATION TEST(AATCC 42-17)		LEVEL 1: MAX. 4.5 GRAM LEVEL 2/3: MAX. 1.0 GRAM
INCREASED MASS (G.)		
FABRIC		
FRONT AREA	0.0	
BACK AREA	0.0	
SLEEVE AREA	0.0	
SEAM		
SLEEVE SEAM	0.2	
TIE ATTACHMENT	0.8	
WATER REPELLENCY: SPRAY TEST(AATCC 22-17)		
AS RECEIVED (RATING)	95	/

SPRAY RATING:
100 – NO STICKING OR WETTING OF UPPER SURFACE
90 – SLIGHT RANDOM STICKING OR WETTING OF UPPER SURFACE
80 – WETTING OF UPPER SURFACE AT SPRAY POINTS
70 – PARTIAL WETTING OF WHOLE OF UPPER SURFACE
50 – COMPLETE WETTING OF WHOLE OF UPPER SURFACE
0 – COMPLETE WETTING OF WHOLE UPPER AND LOWER SURFACE

C/N

TEST RESULTS

TEST PROPERTY		REQUIREMENTS
WATER VAPOR TRANSMISSION OF MATERIALS(ASTM E96, PROCEDURE D, AT 32F, 50%RH, 24 HRS, METHOD USED: WATER)		
BACK SIDE TO WATER (G. / SQ.M .24 HRS)	77.3	/

STANDARD TEST CONDITIONS:
PROCEDURE D - UPRIGHT WATER METHOD AT 90°F (32.2°C)

BREAKING STRENGTH OF TEXTILE FABRICS: GRAB TEST(ASTM D5034-09 (R2017), 1-INCH G-E, INSTRON, SPEED 12 IN/MIN LOAD CELL: 100N)

WARP (LBS.)	14.9*	MIN. 15.0 LBS.
WEFT (LBS.)	10.7*	MIN. 15.0 LBS.

TEARING STRENGTH: TRAPEZOID(ASTM D5733)

WARP DIRECTION (LBS.)	5.54	MIN. 1.5 LBS.
WEFT DIRECTION (LBS.)	7.23	MIN. 1.5 LBS.

FAILURE IN SEWN SEAMS: WOVEN FABRICS(ASTM D1683-17 (R2018), LOAD CELL: 500N)

	SEAM SLIPPAGE (LBF. AT 1/4 INCH)		SEAM STRENGTH (LBF.)		MODE OF FAILURE
	Test Data	Requirement	Test Data	Requirement	
BACK ARMHOLE	NSS	10.0	13.2	10.0	FR
SHOULDER	NSS	10.0	14.8	10.0	FR
STRESS POINT TIE ATTACHMENT	N/A	10.0	9.0*	10.0	FRS

REMARKS:
NSS - NO 0.25″ SEAM SLIPPAGE NOTED
* - FAILED RESULT
FRS – FABRIC RUPTURE AT SEAM
FR – FABRIC RUPTURE AT PLACES OTHER THAN JAW OR AT SEAM

FABRIC WEIGHT(ASTM D3776-09A (R2017), OPTION C)

OZ / SQ. YD	1.31	/
G. / SQ. M	44.3	/

TEST RESULTS

TEST PROPERTY **REQUIREMENTS**

FLAMMABILITY OF CLOTHING TEXTILES(16 CFR 1610)

FABRIC SURFACE PLAIN FIBER SURFACE
DIRECTION TO BE TESTED FACE LENGTHWISE
AS RECEIVED

	TIME OF FLAME SPREAD	BURNING CODE
1	/	IBE
2	/	IBE
3	5.4	/
4	/	IBE
5	/	IBE
AVG	5.4 (For 1 Specimen)	

CLASSIFICATION PASS CLASS 1
THE TESTING CONDUCTED AS RECEIVED ONLY.
GARMENTS "DAMAGED" BY REFURBISHING

DNI	DID NOT IGNITE.
IBE	IGNITED, BUT EXTINGUISHED.
SF uc	SURFACE FLASH, UNDER THE STOP THREAD, BUT DOES NOT BREAK THE STOP THREAD.
SF pw	SURFACE FLASH, PART WAY. NO TIME SHOWN BECAUSE THE SURFACE FLASH DID NOT REACH THE STOP THREAD.
SF poi	SURFACE FLASH, AT THE POINT OF IMPINGEMENT ONLY. (EQUIVALENT TO “DID NOT IGNITE” FOR PLAIN SURFACES.)
0.0 sec.	ACTUAL BURN TIME MEASURED AND RECORDED BY THE TIMING DEVICE.
0.0 SF only	TIME IN SECONDS, SURFACE FLASH ONLY. NO DAMAGE TO THE BASE FABRIC.
0.0 SFBB	TIME IN SECONDS, SURFACE FLASH BASE BURN STARTING AT PLACES OTHER THAN THE POINT OF IMPINGEMENT AS A RESULT OF SURFACE FLASH.
0.0 SFBB poi	TIME IN SECONDS, SURFACE FLASH BASE BURN STARTING AT THE POINT OF IMPINGEMENT. THIS RESULT DOES NOT QUALIFY AS A BASE BURN UNDER THE CURRENT INTERPRETATION OF PART OF 16 CFR PART 1610.
0.0 SFBB poi*	TIME IN SECONDS, SURFACE FLASH BASE BURN POSSIBLY STARTING AT THE POINT OF IMPINGEMENT. THE ASTERISK (*) IS ACCOMPANIED BY THE FOLLOWING STATEMENT: “UNABLE TO MAKE ABSOLUTE DETERMINATION AS TO SOURCE OF BASE BURNS.” THIS STATEMENT IS ADDED TO THE RESULT OF ANY SPECIMEN IF THERE IS A QUESTION AS TO ORIGIN OF THE BASE BURN.

Tested Item(s) : I001 Light blue non-woven fabic with transparent plastic (body)

TEST RESULT – CHEMICAL

FORMALDEHYDE

TEST METHOD I: ISO 14184-1:2011 (Textile)
TEST METHOD II: ISO 17226-1:2018 / ISO 17226-2:2018 (Leather)

Test Item(s)	Test Method	Result (mg/kg)	Conclusion	Limit (mg/kg)
I001	I	ND	PASS	16 mg/kg for children under 36 months 75 mg/kg for all other ages

Note: mg/kg = milligram per kilogram
Detection Limit: 5 mg/kg
"<" = less than
ND = not detected
">" = more than

pH VALUE

TEST METHOD I: ISO 3071:2020 (Textile)
TEST METHOD II: EN ISO 4045:2008 (Leather)

Test Item(s)	Test Method	Result	Conclusion	Limit
I001	I	5.9	PASS	Textiles: 4.0-8.0 Leather: 3.5-7.5

C/N

TEST RESULT – CHEMICAL

EXTRACTABLE HEAVY METAL

TEST METHOD: ISO 105-E04:2013 / ICP-MS/UV-VIS analysis

Parameter	Result (mg/kg)	Limit (mg/kg)
	I001	
Antimony (Sb)	ND	30
Arsenic (As)	ND	0.2
Barium (Ba)	ND	1000
Cadmium (Cd)	ND	0.1
Chromium (Cr)	ND	Textiles: 2.0 Leather: 200
Lead (Pb)	ND	0.2
Mercury (Hg)	ND	0.02
Selenium (Se)	ND	500
Conclusion	PASS	

Note: mg/kg = milligram per kilogram ND = not detected "<" = less than ">" = more than
Detection Limit (mg/kg): As (0.1), Sb (1), Cd (0.1), Cr (0.1), Pb (0.1), Hg (0.02), Ba (1), Se (6)

TOTAL LEAD IN SUBSTRATE

TEST METHOD: CPSC-CH-E1001-08.3 / CPSC-CH-E1002-08.3

Test Item(s)	Result (mg/kg)	Conclusion	Limit (mg/kg)
I001	ND	PASS	100

Note: mg/kg = milligram per kilogram "<" = less than ">" = more than
Detection Limit: 10 mg/kg ND = not detected

C/N

TEST RESULT – CHEMICAL

PHTHALATES

TEST METHOD: CPSC-CH-C1001-09.4 (Mod)

Test Item(s)	Result		Conclusion	Limit (mg/kg)
	Detected Analyte(s)	Conc. (mg/kg)		
I001	ND	ND	PASS	500

Note: mg/kg = milligram per kilogram
Detection Limit: Each 50 mg/kg;
"<" = less than
ND = not detected
">" = more than

Name of Phthalates	Abbreviation
Di-iso-nonylphthalate	DINP
Di-n-octylphthalate	DNOP
Di(2-ethylhexyl)- phthalate	DEHP
Diisodecylphthalate	DIDP
Butylbenzylphthalte	BBP
Dibutylphthalate	DBP
Diisobutylphthalate	DIBP
Di-iso-heptyl phthalate	DIHP
Di-heptyl,nonyl,undecyl phthalate	DHNUP
Di-(2-methoxymethyl)-phthalate	DMEP
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	DPP
Di-cyclohexylphthalate	DCHP
Diethyl phthalate	DEP
Diisopentylphthalate	DIPP
Di-n-hexyl phthalate	DnHP or DHEXP
Di-n-octyl phthalate	DNOP
N-pentyl-iso-pentyl phthalate	PIPP
Di-n-pentyl phthalate	DnPP or DPENP
Dimethyl phthalate	DMP
1,2,- Benzenedicarboxylic acid, dihexyl ester, branched and linear	-
1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate	

C/N

TEST RESULT – CHEMICAL

AZO DYES IN TEXTILE AND LEATHER

TEST METHOD I: EN ISO 14362-1:2017 (Textile)
TEST METHOD II: ISO 17234-1:2015 (Leather)
TEST METHOD III: EN ISO 14362-3:2017 (pAAB analysis) (Textile)
EN ISO 17234-2:2011 (pAAB analysis) (Leather)

Test Item(s)	Result		Conclusion	Limit (mg/kg)
	Detected Analyte(s)	Conc. (mg/kg)		
I001	ND	ND	PASS	Textiles: 20 Leather: 30 Surface coatings: 20

Note: mg/kg = milligram per kilogram "<" = less than ">" = more than
Detection Limit = 5 mg/kg ND = not detected

Remark: 1. Azo colorants that are able to form p-aminoazobenzene, generate aniline and 1,4-phenylenediamine under the condition of this method. Aniline and 1,4-phenylenediamine are not detected under the condition of this method.
2. The presence of these colorants cannot be confirmed by the method stated as above. The result of p-aminoazobenzene shown is analysed and confirmed by with reference to EN ISO 14362-3/ EN ISO 17234-2.

LIST OF BANNED AMINES Specified Amines		
Number	Chemical Name (German)	CAS Number
1.	4-Aminodiphenyl	92-67-1
2.	Benzidine	92-87-5
3.	4-Chlor-o-toluidine	95-69-2
4.	2-Napthylamine	91-59-8
5.	o-Aminoazotoluene	97-56-3
6.	2-Amino-4-nitrotoluene	99-55-8
7.	p-Chloraniline	106-47-8
8.	2,4-Diaminoanisole	615-05-4
9.	4,4'-Diaminodiphenylmethane	101-77-9
10.	3,3'-Dichlorbenzidine	91-94-1
11.	3,3 –Dimethoxybenzidine	119-90-4
12.	3,3'-Dimethylbenzidine	119-93-7
13.	3,3'-Dimethyl-4,4'-diaminodiphenylmethane	838-88-0
14.	p-Cresidine	120-71-8
15.	4,4'-Methylen-bis-(2-Chloraniline)	101-14-4
16.	4,4'-Oxydianiline	101-80-4
17.	4,4'-Thiodianiline	139-65-1
18.	o-Toluidine	95-53-4
19.	2,4-Toluylendiamine	95-80-7
20.	2,4,5-Trimethylaniline	137-17-7
21.	2,4-Dimethylaniline	95-68-1
22.	2,6-Dimethylaniline	87-62-7
23.	2-Methoxyaniline (= o-Anisidine)	90-04-0
24.	4-Aminoazobenzole*	60-09-3

--- End of report --

C/N