



Test
TS EN ISO/IEC 17025
AB-0716-T

AB-0716-T
TURT200150323
11-20

TEST REPORT

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REPORT NUMBER : TURT200150323
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BUYER SASO
SAMPLE DESCRIPTION :
Sample 1 One sample of yellow woven panel
Sample 2 One sample of grey woven part
DATE IN : 12 November ,2020 (14:30:00)
RESUBMIT DATE : 19 November ,2020
DATE OUT : 24 November ,2020
ORDER NO : LEI20111121A
FIBER COMPOSITION : Not Given
NOTE : Test methods and requirements were given by the request of the applicant.
PROVIDED CARE LABEL : Not Given

Nihal AKGUL
Customer Care Executive

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TEST	SAMPLE	
	1	2
Determination of Odour	P	P
Organo Tin Compounds	P	P
Color Fastness To Artificial Saliva	P	P
Colour Fastness to Perspiration	P	P
Colour Fastness to Rubbing	P	P
Colour Fastness to Water	P	P
Pesticides in Textile Materials	P	P
Determination of Allergenic Dyestuff	P	P
Determination of Brominated Flame Retardants	P	P
Determination of Carcinogenic Dyestuff	P	P
Determination of Free and Hydrolised Formaldehyde Test (Water extraction method)	P	P
Determination of Phosphorus Flame Retardants	P	P
Determination of Polychlorophenols	P	P
Determination of the Content of Bonds Based on Chlorobenzene and Chlorotoluene by GC-MS Analysis	P	P
Heavy Metals Analysis	P	P
pH Determination	F	P

P = MEETS BUYER' S REQUIREMENT / F = DOES NOT MEET BUYER' S REQUIREMENT / NR = NO REQUIREMENT / SC=STILL CONTINUES / X=NOT PERFORMED / NA = NOT APPLICABLE / LS = LACK OF SAMPLE / NC = NO COMMENT / I = INCONCLUSIVE / # = SEE RESULT / NF = NEEDS FURTHER TESTING / A = ABSENT / M = MARGINAL ACCEPT / SD = SEE DETAILS ENCLOSED / FS: FURTHER STEPS

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Test Method	Results	Requirements
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(*)Determination of Odour

SNV 195 651: 1968-03

Result

Sample 1

1

Odourless

Sample 2

1

Odourless

Rating	Description
1	Odourless
2	Weak odour
3	Medium odour
4	Strong odour
5	Very strong odour

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Organo Tin Compounds

INTERTEK IHTM AL.2.030 refer to ISO 17353:2004 / BS EN ISO 17353:2005

Sample 1		
Sample 1&2		
Tributyltin (TBT)	Not Detected	1 ppm
Dibutyltin (DBT)	Not Detected	

Detection Limit: 0.005%

Remark : The above limit was quoted according to Annex XVII Items 20 of the REACH Regulation (EC) no. 1907/2006 & amendment (EU) No. 276/2010 (formerly known as Decision 2009/425/EC) for organotin content.

*The reported value was calculated by summation of the values of Tri-butyltin, Tri-phenyltin, Tri-methyltin Tri-octyltin, Tri-cyclohexyltin

Test Method	Results	Requirements
Color Fastness To Artificial Saliva		
64 LFGB B.82.10-1(equivalent to BVL B-82.10-1: 2011 (according to B 82.92-3:2011) (equivalent DIN 53160-1:2010) and B82.02-13:2011 (equivalent DIN 53160-2:2010))		
	Result	
Sample 1		
Saliva(B.82.92-3: 2011 (Equivalent DIN 53160-1:2010))		
Colour Staining on filter paper	4-5	4
CF Sweat(Perspiration) (B82.02-13: 2011(Equivalent DIN 53160-2:2010))		
Colour Staining on filter paper	4-5	4
Sample 2		
Saliva(B.82.92-3: 2011 (Equivalent DIN 53160-1:2010))		
Colour Staining on filter paper	4-5	4
CF Sweat(Perspiration) (B82.02-13: 2011(Equivalent DIN 53160-2:2010))		
Colour Staining on filter paper	4-5	4

Test Method	Results	Requirements
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Colour Fastness to Perspiration
ISO 105 E04:2013

Shade	Staining					
Change	Acetate	Cotton	Nylon	Polyester	Acrylic	Wool

Sample 1								
pH=5.5 Acid	4-5	4-5	4-5	4	4-5	4-5	4-5	CC:3-4 S:3-4
pH=8.0 Alkaline	4-5	4-5	4-5	4-5	4-5	4-5	4-5	

Sample 2								
pH=5.5 Acid	4-5	4-5	4-5	4-5	4-5	4-5	4-5	CC:3-4 S:3-4
pH=8.0 Alkaline	4-5	4-5	4-5	4-5	4-5	4-5	4-5	

Specimen and Perspirometer position: Vertical

Test Method	Results	Requirements
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Colour Fastness to Rubbing
ISO 105 X12:2016

Original

Dry	Wet
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Sample 1

Dry	Wet	Requirements
4-5	4-5	Dry: 4 Wet:4

Sample 2

Dry	Wet	Requirements
4-5	4-5	Dry: 4 Wet:4

Unless otherwise is mentioned, specimen tested diagonally
Condition :ISO 139, Crockmeter, Rubbing Cloth, 9N, 10 times, ISO 105 A03 (Grey Scale for Staining)
Percentage of soaking: 95% - 100%
Finger: 16±0.1 mm diameter

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Test Method	Results	Requirements
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Colour Fastness to Water
ISO 105 E01:2013

Shade	Staining					
Change	Acetate	Cotton	Nylon	Polyester	Acrylic	Wool

Sample 1								
	4-5	4-5	4-5	4-5	4-5	4-5	4-5	C:3 S:3

Sample 2								
	4-5	4-5	4-5	4-5	4-5	4-5	4-5	C:3 S:3

Specimen and Perspirometer position: Vertical

Test Method	Results	Requirements
(*)Pesticides in Textile Materials		
INTERTEK IHTM AL.2.086		
Sample 1		
Sample 1&2		
2,4,5-T	Not Detected	0.5 ppm
2,4-D	Not Detected	
Acetamiprid	Not Detected	
Aldicarb	Not Detected	
Azinophosmethyl	Not Detected	
Azinophosethyl	Not Detected	
Aldrine	Not Detected	
Bromophos-ethyl	Not Detected	
Captafol	Not Detected	
Carbaryl	Not Detected	
Chlordane	Not Detected	
Chlordimeform	Not Detected	
Chlorfenvinphos	Not Detected	
Coumaphos	Not Detected	
Cyfluthrin	Not Detected	
Cyhalothrin	Not Detected	
Cypermethrin	Not Detected	
DEF	Not Detected	
Deltamethrin	Not Detected	
DDD	Not Detected	
DDE	Not Detected	
DDT	Not Detected	
Diazinon	Not Detected	
Dichlorprop	Not Detected	
Dicrotophos	Not Detected	
Dieldrine	Not Detected	
Dimethoate	Not Detected	
Dinoseb and salts	Not Detected	
Dinotefuran	Not Detected	
Endosulfan, ALFA	Not Detected	
Endosulfan, BETA	Not Detected	
Endrine	Not Detected	
Esfenvalerate	Not Detected	
Fenvalerate	Not Detected	
Heptachlor	Not Detected	
Heptachloroepoxide	Not Detected	
Hexachlorobenzene	Not Detected	
Hexachlorocyclohexane, ALFA	Not Detected	
Hexachlorocyclohexane, BETA	Not Detected	
Hexachlorocyclohexane, GAMA	Not Detected	

Test Method	Results	Requirements
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(*)Pesticides in Textile Materials
INTERTEK IHTM AL.2.086

	<u>Result</u>	
Imidacloprid	Not Detected	
Isodrine	Not Detected	
Kelevane	Not Detected	
Kepone	Not Detected	
Lindane	Not Detected	
Malathion	Not Detected	
MCPA	Not Detected	
MCPB	Not Detected	
Mecoprop	Not Detected	
Metamidophos	Not Detected	0.5 ppm
Methoxychlor	Not Detected	
Mirex	Not Detected	
Monocrotophos	Not Detected	
Nitenpyram	Not Detected	
Parathion	Not Detected	
Parathion-methyl	Not Detected	
Perthane	Not Detected	
Phosdrin/Mevinphos	Not Detected	
Phosphamidone	Not Detected	
Propethamphos	Not Detected	
Profenophos	Not Detected	
Quinalphos	Not Detected	
Strobane	Not Detected	
Telodrine	Not Detected	
Thiacloprid	Not Detected	
Thiamethoxam	Not Detected	
Toxaphene	Not Detected	
Trifluralin	Not Detected	
Chlorobenzilate	Not Detected	
Clothianidin	Not Detected	
RESULTS (TOTAL)	Not Detected	

ppm (part per million) =mg / kg
Detection Limit =0.1 ppm
ND =Not Detected

Test Method	Results	Requirements
Determination of Allergenic Dyestuff		
ISO 16373-2:2014		
By High Performance Liquid Chromatography&Mass Spectroscopy (LC-MS-MS) & HPLC - DAD Analysis		
Sample 1		
Sample 1&2		
C.I. Disperse Blue 1	Not Detected	Not Detected
C.I. Disperse Blue 3	Not Detected	
C.I. Disperse Blue 7	Not Detected	
C.I. Disperse Blue 26	Not Detected	
C.I. Disperse Blue 35	Not Detected	
C.I. Disperse Blue 102	Not Detected	
C.I. Disperse Blue 106	Not Detected	
C.I. Disperse Blue 124	Not Detected	
C.I. Disperse Brown 1	Not Detected	
C.I. Disperse Orange 1	Not Detected	
C.I. Disperse Orange 3	Not Detected	
C.I. Disperse Orange 37/76/59	Not Detected	
C.I. Disperse Orange 61	Not Detected	
C.I. Disperse Orange 149	Not Detected	
C.I. Disperse Red 1	Not Detected	
C.I. Disperse Red 11	Not Detected	
C.I. Disperse Red 17	Not Detected	
C.I. Disperse Yellow 1	Not Detected	
C.I. Disperse Yellow 3	Not Detected	
C.I. Disperse Yellow 9	Not Detected	
C.I. Disperse Yellow 23	Not Detected	
C.I. Disperse Yellow 39	Not Detected	
C.I. Disperse Yellow 49	Not Detected	

ppm (part per million) = mg/kg
 Detection Limit = 3 ppm
 < = Less Than

Test Method	Results	Requirements
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Determination of Brominated Flame Retardants

BS EN ISO 17881-1:2016 by GC-MS Determination

Sample 1

	Result	Requirement
Monobromobiphenyl (MonoBB)(2052-07-5)	Not Detected	Not Detected
Dibromobiphenyl (DiBB)(57422-77-2)	Not Detected	
Tribromobiphenyl (TriBB)(59080-34-1)	Not Detected	
Tetrabromobiphenyl (TetraBB)(60044-24-8)	Not Detected	
Pentabromo-1,1-biphenyl (PentaBB)(59080-39-6)	Not Detected	
Hexabromobiphenyl (HexaBB)(60044-26-0)	Not Detected	
Heptabromo-1,1-biphenyl (HeptaBB)(88700-06-5)	Not Detected	
Octabromobiphenyl (OctaBB)(67889-00-3)	Not Detected	
Nonabromobiphenyl (NonaBB)(69278-62-2)	Not Detected	
Decabromobiphenyl (DecaBB)(13654-09-6)	Not Detected	
Tetrabromodiphenylether (TetraBDE)(5436-43-1)	Not Detected	
Pentabromodiphenylether (PentaBDE)(32534-81-9)	Not Detected	
Hexabromodiphenylether (HexaBDE)(207122-15-4)	Not Detected	
Heptabromodiphenylether (HeptaBDE)(207122-16-5)	Not Detected	
Octabromodiphenylether (OctaBDE)(337513-72-1)	Not Detected	
Decabromodiphenylether (DecaBDE)(1163-19-5)	Not Detected	
Hexabromocyclododecane (HBCDD)(25637-99-4)	Not Detected	

ppm (part per million) = mg/kg

Detection Limit = 5 ppm

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Test Method	Results	Requirements
Determination of Brominated Flame Retardants		
BS EN ISO 17881-1:2016 by GC-MS Determination		
Sample 2		
	Result	Requirement
Monobromobiphenyl (MonoBB)(2052-07-5)	Not Detected	Not Detected
Dibromobiphenyl (DiBB)(57422-77-2)	Not Detected	
Tribromobiphenyl (TriBB)(59080-34-1)	Not Detected	
Tetrabromobiphenyl (TetraBB)(60044-24-8)	Not Detected	
Pentabromo-1,1-biphenyl (PentaBB)(59080-39-6)	Not Detected	
Hexabromobiphenyl (HexaBB)(60044-26-0)	Not Detected	
Heptabromo-1,1-biphenyl (HeptaBB)(88700-06-5)	Not Detected	
Octabromobiphenyl (OctaBB)(67889-00-3)	Not Detected	
Nonabromobiphenyl (NonaBB)(69278-62-2)	Not Detected	
Decabromobiphenyl (DecaBB)(13654-09-6)	Not Detected	
Tetrabromodiphenylether (TetraBDE)(5436-43-1)	Not Detected	
Pentabromodiphenylether (PentaBDE)(32534-81-9)	Not Detected	
Hexabromodiphenylether (HexaBDE)(207122-15-4)	Not Detected	
Heptabromodiphenylether (HeptaBDE)(207122-16-5)	Not Detected	
Octabromodiphenylether (OctaBDE)(337513-72-1)	Not Detected	
Decabromodiphenylether (DecaBDE)(1163-19-5)	Not Detected	
Hexabromocyclododecane (HBCDD)(25637-99-4)	Not Detected	

ppm (part per million) = mg/kg

Detection Limit = 5 ppm

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Test Method	Results	Requirements
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Determination of Carcinogenic Dyestuff

ISO 16373-2:2014

Sample 1

Test Method	Results	Requirements
SOLVENT YELLOW 1	Not Detected	Not Detected
SOLVENT YELLOW 2	Not Detected	
SOLVENT YELLOW 3	Not Detected	
ACID RED 26	Not Detected	
BASIC RED 9	Not Detected	
BASIC VIOLET 14	Not Detected	
DIRECT BLACK 38	Not Detected	
DIRECT BLUE 6	Not Detected	
DIRECT RED 28	Not Detected	
DISPERSE BLUE 1	Not Detected	
DISPERSE ORANGE 11	Not Detected	
DISPERSE YELLOW 3	Not Detected	
ACID RED 114	Not Detected	

ppm (part per million) =mg / kg
Detection Limit =0.2 mg/L ; 15 ppm
< =Less Than

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Test Method	Results	Requirements
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Determination of Carcinogenic Dyestuff
ISO 16373-2:2014

Sample 2

SOLVENT YELLOW 1	Not Detected	Not Detected
SOLVENT YELLOW 2	Not Detected	
SOLVENT YELLOW 3	Not Detected	
ACID RED 26	Not Detected	
BASIC RED 9	Not Detected	
BASIC VIOLET 14	Not Detected	
DIRECT BLACK 38	Not Detected	
DIRECT BLUE 6	Not Detected	
DIRECT RED 28	Not Detected	
DISPERSE BLUE 1	Not Detected	
DISPERSE ORANGE 11	Not Detected	
DISPERSE YELLOW 3	Not Detected	
ACID RED 114	Not Detected	

ppm (part per million) =mg / kg
Detection Limit =0.2 mg/L ; 15 ppm
< =Less Than

Determination of Free and Hydrolised Formaldehyde Test (Water extraction method)

BS EN ISO 14184 - 1 :2011 Free and Hydrolized Formaldehyde by UV-VIS Analysis

Result

Sample 1
Sample 1&2

Not Detected

Not Detected

ppm (part per million) =mg / kg
Detection Limit =5 ppm
< =Less Than

Note :Sample was received unsealed

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Test Method	Results	Requirements
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Determination of Phosphorus Flame Retardants

INTERTEK IHTM AL.2.405 refer to ISO 17881-2:2016

By Liquid Chromotography- Mass Spectrometry (LC-MS-MS) Analysis

Sample 1	Result	Requirement
Sample 1-2		
Tris(2-chloroethyl) phosphate (TCEP) (115-96-8)	Not Detected	Not Detected
Tri-(2,3-dibromopropyl) phosphate (TRIS)(126-72-7)	Not Detected	
Tris-aziridinyl phosphine oxide (TEPA) (545-55-1)	Not Detected	

ppm (part per million) =mg / kg
Detection Limit = 1 ppm

Determination of Polychlorophenols

BVL B 82.02-8:2001-06

Sample 1
Sample 1&2

	Result	Requirement
Pentachlorophenol (PCP)	Not Detected	0.5 ppm
Tetrachlorophenol (TeCP)		
2,3,4,5 Tetrachlorophenol	Not Detected	
2,3,4,6 Tetrachlorophenol	Not Detected	
2,3,5,6 Tetrachlorophenol	Not Detected	
Trichlorophenol (TriCP)		
2,3,4 Trichlorophenol	Not Detected	
2,3,5 Trichlorophenol	Not Detected	
2,3,6 Trichlorophenol	Not Detected	
2,4,5 Trichlorophenol	Not Detected	
2,4,6 Trichlorophenol	Not Detected	
3,4,5 Trichlorophenol	Not Detected	
Orthophenylphenol (OPP)	Not Detected	

ppm (part per million) =mg / kg Detection Limit = PCP, TeCP : 0.05 ppm (lower limit) or 0.5 ppm ; OPP : 0.5 ppm
< = Less Than ND = Not Detected

Remark : PCP Content Requirement in Annex XVII Item 22 of the Reach Regulation (EC) No : 1907/2006

Test Method	Results	Requirements
Determination of the Content of Bonds Based on Chlorobenzene and Chlorotoluene by GC-MS Analysis		
INTERTEK IHTM AL.2.005 refer to DIN 54232 : 2010		
By Solvent Extraction And Gas Chromatography Mass Spectrometry Analysis		
Sample 1		
Sample 1&2		
	RESULT	REQUIREMENT
Chlorobenzene	Not Detected	1 ppm
1,2-Dichlorobenzene	Not Detected	
1,3-Dichlorobenzene	Not Detected	
1,4-Dichlorobenzene	Not Detected	
1,2,3-Trichlorobenzene	Not Detected	
1,2,4-Trichlorobenzene	Not Detected	
1,3,5-Trichlorobenzene	Not Detected	
1,2,3,4-Tetrachlorobenzene	Not Detected	
1,2,3,5-Tetrachlorobenzene	Not Detected	
1,2,4,5-Tetrachlorobenzene	Not Detected	
Pentachlorobenzene	Not Detected	
Hexachlorobenzene	Not Detected	
2-Chlorotoluene	Not Detected	
3-Chlorotoluene	Not Detected	
4-Chlorotoluene	Not Detected	
2,3-Dichlorotoluene	Not Detected	
2,4-Dichlorotoluene	Not Detected	
2,5-Dichlorotoluene	Not Detected	
2,6-Dichlorotoluene	Not Detected	
3,4-Dichlorotoluene	Not Detected	
2,3,6-Trichlorotoluene	Not Detected	
2,4,5-Trichlorotoluene	Not Detected	
4-Tetrachlorotoluene	Not Detected	
Pentachlorotoluene	Not Detected	

ppm (part per million)
<

=mg / kg
=Less Than

Detection Limit
nd

=0.1 ppm
=Not Detected

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Test Method	Results	Requirements
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Heavy Metals Analysis

INTERTEK IHTM AL.2.071 with refer to ISO 105 E-04

Extractable with artificial perspiration solution and Determination by ICP-MS

Sample 1

Sample 1&2

	Detection Limit	Result	Requirement
Lead (Pb)	0.1 ppm	Not Detected	1 ppm
Cadmium (Cd)	0.1 ppm	Not Detected	0.14 ppm
Mercury (Hg)	0.01 ppm	Not Detected	0.02 ppm
Arsenic (As)	0.1 ppm	Not Detected	1 ppm
Copper (Cu)	0.1 ppm	Not Detected	4 ppm
Cobalt (Co)	0.1 ppm	Not Detected	50 ppm
Chromium (Cr)	0.1 ppm	Not Detected	2 ppm
Nickel (Ni)	0.1 ppm	Not Detected	4 ppm
Antimony (Sb)	0.1 ppm	1.3 ppm	30 ppm

ppm : part per million (mg/kg)
< =Less Than

pH Determination

ISO 3071 : 2020 with KCl Extracting Solution

Temperature of Test Solution: 22°C

pH of extraction solution: 5.7

pH

Sample 1

9.6

4.0-7.5

Sample 2

6.5

4.0-7.5

Test Method	Results	Requirements
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Colour Change Grading		Staining Grading	
Grade	Description	Grade	Description
5	Negligible or no change	5	Negligible or no change
4	Slight colour change	4	Slight staining
3	Moderate colour change	3	Moderate staining
2	Distinct colour change	2	Distinct staining
1	Severe colour change	1	Severe staining

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Sample 1



Sample 2



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