Test Report

No. AJHL1609010169OT Date: 01.09.20

BIRMINGHAM SAFETY WEAR LTD
UNIT 14 NUMBER 23 BICKFORD ROAD ASTON

THE TEST REPORT IS TO SUPERSEDE THE TEST REPORT No.: AJHL1609010169OT,

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

Sample Description: PVC FILM
Color: WHITE
Composition: PVC
Style/Item No.: DLT7002
Addition Information: 0.36MM THICKNESS
End Use Application: APRON

Test Requested	Selected test(s) as requested by client.
Test Method	Please refer to next page(s).
Test Results :	Please refer to next page(s).

Result Summary :

Test Requested	Conclusion
Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments– Overall migration	PASS
Commission Regulation (EU) No 10/2011 of 14 January 2011 and Commission Regulation (EU) No 284/2011 of 22 March 2011 –Specific Migration of Primary Aromatic Amine	PASS
Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments – Specific migration of Hexamethylenediamine	PASS
Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments – Specific Migration of Heavy Metal	PASS
Commission Regulation (EU) 2018/213 of 12 February 2018 amending Regulation (EU) No 10/2011- Total content of Bisphenol-A	PASS

Signed for and on behalf of
SGS-CSTC Standards Technical Services Ltd.

Allen Zou
Technical Manager

Remarks :

(1) mg/dm² = milligram per square decimeter
(2) mg/kg = milligram per kilogram
(3) °C= degree Celsius
(4) < = less than
(5) MDL = Method Detection Limit
(6) ND = Not Detected (< MDL)

Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments– Overall migration

Test Method : With reference to Commission Regulation (EU) No 10/2011 of 14 January 2011 Annex III and Annex V for selection of condition and EN 1186-1:2002 for selection of test methods;]EN 1186-9: 2002 aqueous food simulants by article filling method; EN 1186-14: 2002 substitute test.

Simulant Used		Temperature	Max. Permissible Limit	Result of 001 Overall Migration
3% Acetic Acid (W/V)	4.0hr(s)	100°C	10mg/dm²	<3 0mg/dm²

Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments– Overall migration

Test Method With reference to Commission Regulation (EU) No 10/2011 of 14 January 2011 Annex III and Annex V for selection of condition and EN 1186-1:2002 for selection of test methods;]EN 1186-9: 2002 aqueous food simulants by article filling method; EN 1186-14: 2002 substitute test.

Simulant Used	Time	Temperature	Max. Permissible Limit	Result of 001 Overall Migration
3% Acetic Acid (W/V) Aqueous Solution	4.0hr(s)	100°C	10mg/dm²	<3 0mg/dm²
10% Ethanol (V/V) Aqueous Solution	4.0hr(s)	100°C	10mg/dm²	<3.0mg/dm²
95% Ethanol (V/V) Aqueous Solution (Rectified Olive Oil Substitute)	6 0hr(s)	60°C	10mg/dm²	<3.0mg/dm²
Isooctane (Rectified Olive Oil Substitute)	4.0hr(s)	60°C	10mg/dm²	6.7mg/dm²

Notes :

(1) Ana ytical tolerance of aqueous simulants is 2 mg/dm².
(2) Ana ytical tolerance of fatty food simulants is 3 mg/dm².
(3) Test condition & simulant were specified by client.
(4) The migration results are based on the first migration.

Commission Regulation (EU) No 10/2011 of 14 January 2011 and Commission Regulation (EU) No 284/2011 of 22 March 2011 –Specific Migration of Primary Aromatic Amine

Test Method : With reference to EN 13130-1: 2004, analysis was performed by LC-MS-MS.

Sample 001

Simulant Used : 3% Acetic acid (W/V) aqueous solution
Test Condition 100 °C 4.0 hr(s)

Test Item(s)	Max Permissible Limit	Unit	MDL	Test result
Migration times				1st
Area/volume				5 8
2,4,5-Trimethylaniline(2,4,5-TMA)	0.01	mg/kg	0.002	ND
2,4-Dimethylaniline(2,4-DMA)	0.01	mg/kg	0.002	ND
2,4-Toluenediamine(2,4-TDA)	0.01	mg/kg	0.002	ND
2,6-Dimethylaniline(2,6-DMA)	0.01	mg/kg	0.002	ND
2,6-Toluenediamine(2,6-TDA)	0.01	mg/kg	0.002	ND
2-Methoxy-5-Methylaniline(2-M-5-MA)	0.01	mg/kg	0.002	ND
3,3 Dimethylbenzidine(3,3-DMB)	0.01	mg/kg	0.002	ND
4,4 Diaminodiphenylether(4,4 DPE)	0.01	mg/kg	0.002	ND
4,4'-Methylenedianiline(4,4-MDA)	0.01	mg/kg	0.002	ND
4,4-Methylenedi-o-toluidine(4,4-MDoT)	0.01	mg/kg	0.002	ND
4-Aminobiphenyl(4-ABP)	0.01	mg/kg	0.002	ND
4 Chloro-Aniline(4-CA)	0 01	mg/kg	0 002	ND
4-Chloro-o-Toluidine(4-CoT)	0 01	mg/kg	0 002	ND
Aniline(ANL)	0.01	mg/kg	0.002	ND
4-Methoxy-mphenylenediamine(4-M-mPDA)	0.01	mg/kg	0.002	ND