



TEST REPORT

Technical Report: (6720)259-0357 (Revision-1)**

September 18, 2020

Revision-1 Date : September 28, 2020

The report is amendment of and supersedes the previous report (6720)259-0357 dated September 18, 2020

Date Received: September 15, 2020

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Sample Description: : BLACK MUSA BIO-LEATHER
(Sample Received in Good Condition).

Color Name:	BLACK	Style No.:	0806702, 0824382
Color Code:	/	Fiber Content:	BANANA FIBER AND WOOL
Order No.:	/	Category:	/
Order	/	Dpt:	/
Placement Date:	/	Product End Use:	/
Age Grade:	/	Material Category:	/
Vendor:	/	Country of Origin:	INDIA
Manufacturer::	/	Country of Destination:	
Pretesting for			
Client Name :			
Test Period:	September 15, 2020 to September 18, 2020		

SUMMARY OF TEST RESULTS

TEST REQUESTED	CONCLUSION	FAILED COMPONENT	REMARK
ALKYLPHENOLS (AP) CONTENT TEST	PASS		
ALKYLPHENOL ETHOXYLATES (APEO) CONTENT TEST	PASS		
AZO DYES CONTENT TEST	PASS		
ORGANOTIN COMPOUNDS CONTENT TEST	PASS		
CHROMIUM (VI) CONTENT TEST	PASS		

Note: The test has been conducted as per vendor's request.

**Revision-1 Property: Change the Sample Description & Fiber Content. as per vendor request.

C/N: (6720)259-0357 (Revision-1)** RS/RS

"Pls. refer the website www.nabl-india.org to view our Scope of accredited Test"

Bureau Veritas Consumer
Products Services (India) Pvt. Ltd.,
C-19, Sec - 7 Noida (U.P.) 201301
PH: 4368283/205

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BUREAU VERITAS CONSUMER PRODUCTS SERVICES (INDIA) PVT. LTD.

SIGNATORIES



CHHATISH KUMAR NATH
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RAHUL SRIVASTAVA
(Manager – Analytical)

REMARK

If there are questions or concerns on this report, please contact the following persons:

Technical enquiry

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General enquiry and invoicing

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Photo of the Submitted Sample



TEST RESULT

Alkylphenols (AP) Content Test

Test Method I : For Textile & Leather:
EN ISO 21084

Test Method II : For Polymers and other materials:
Organic solvent extraction, analysis with reference to EN ISO 21084.

Tested Item(s) : **A** BLACK MUSA BIO-LEATHER

Maximum Limit:	100 mg/kg (sum)
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Tested Item(s)	Test Method	Result			Conclusion
		Detected Analyte(s)	Conc.	Unit	
A	I	NP:	ND	mg/kg	PASS
		OP:	ND		

Note:

ND = Not detected

">" = More than

Conc. = Concentration

ppm = part(s) per million = mg/kg mg/kg = milligram(s) per kilogram

Reporting Limit (mg/kg) : Sum (OP & NP) : 10

Remark:

- The list of alkylphenols is summarized in table of Appendix.

Alkylphenol Ethoxylates (APEO) Content Test

Test Method I : For Textile and Other materials:
With reference to EN ISO 18254-1, analysis by Liquid Chromatograph Mass Spectrometer (LC-MS)

Test Method II : For Leather:
With reference to EN ISO 18218-1 and EN ISO 18254-1

Tested Item(s) : **A** BLACK MUSA BIO-LEATHER

Maximum Limit:	Others: 100 mg/kg (Sum) Recycled materials: 1000 mg/kg (Sum)
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Tested Item(s)	Test Method	Result			Conclusion
		Detected Analyte(s)	Conc.	Unit	
A	II	NPEOs:	ND	mg/kg	PASS
		OPEOs:	ND		

Note:

ND = Not detected

">" = More than

Conc. = Concentration

ppm = part(s) per million = mg/kg mg/kg = milligram(s) per kilogram

Reporting Limit (mg/kg) : Sum (OPEOs & NPEOs) : 20

Remark:

- The list of alkylphenol ethoxylates is summarized in table of Appendix.

TEST RESULT

Azo Dyes Content Test

Test Method I : For Textile and Others:
EN ISO 14362-1:2017

Test Method II : For Leather:
EN ISO 17234-1:2015.

Test Method III : EN ISO 14362-3:2017. (For Textile);
EN ISO 17234-2:2011. (For Leather)

Quantification analysis by Gas Chromatograph Mass Spectrometer (GC-MS) and confirmation by Liquid Chromatograph Diode Array Detector (LC-DAD).

Tested Item(s) : **A** BLACK MUSA BIO-LEATHER

Maximum Limit:	20 mg/kg (Each)
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Tested Item(s)	Test Method	Result			Conclusion
		Detected Analyte(s)	Conc.	Unit	
A	II	ND	ND	mg/kg	PASS

Note:

ND = Not detected

">" = More than

Conc. = Concentration

ppm = part(s) per million = mg/kg

mg/kg = milligram(s) per kilogram

Reporting Limit (mg/kg) : Each : 5

Remark:

- The list of amines in azo dyestuff and arylamine salts from azo colorants are summarized in table of Appendix.
- 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.
- 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 EN ISO 14362-3:2017 or EN ISO 17234-2: 2011.
- Conducting the official method 4,4-diaminodiphenylmethane has been detected. Please note that detected aromatic amines must stem from azodyes but not from other materials e.g. Polyurethane. If forbidden amines are built by others materials (e.g. Polyurethane) the sample doesn't fail according to the European Legislation. By extracting the sample directly without applying the reduction step 4,4-Diisocyanatodiphenylmethane has been detected.
- Test Item(s) < For E.g. I006 > has (have) total mass of less than 0.5 gram and should be defined as minor component(s). The result(s) of this (these) Test Item(s) may has (have) a greater uncertainty due to lower material homogeneity.

TEST RESULT

Organotin Compounds Content Test

Test Method : With reference to ISO/TS 16179:2012. Methanol/Ethanol extraction, derivatisation and analysis by Gas Chromatograph Mass Spectrometer (GC-MS).

Tested Item(s) : **A** BLACK MUSA BIO-LEATHER

Maximum Limit:	DBT, DOT, MBT, TCyHT, TMT, TOT & TPT: 1 mg/kg (Each) TBT, TPhT: 0.5 mg/kg (Each)
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Tested Item(s)	Result			Conclusion
	Detected Analyte(s)	Conc.	Unit	
A	ND	ND	mg/kg	PASS

Note:

ND = Not detected

">" = More than

Conc. = Concentration

ppm = part(s) per million = mg/kg

mg/kg = milligram(s) per kilogram

Reporting Limit (mg/kg) : Each : 0.1

Remark:

- The list of organotin compounds is summarized in table of Appendix.

Chromium (VI) Content Test

Test Method I : Textile, Cr (VI) analysis:
With reference to DIN EN 16711-2:2016 and EN ISO 17075-1

Test Method II : Leather, Cr (VI) analysis:
With reference to EN ISO 17075-1 and/ or EN ISO 17075-2 (IC)

Tested Item(s) : **A** BLACK MUSA BIO-LEATHER

Maximum Limit:	Type I	Textile: 1 mg/kg
	Type II	Leather (0-3 years, i.e. ≤ 98 cl): 0.5 mg/kg
	Type III	Leather (others): ≤3 mg/kg

Tested Item(s)	Type	Test Method	Result	Unit	Conclusion
A	III	II	ND	mg/kg	PASS

Note:

ND = Not detected

">" = More than

ppm = part(s) per million = mg/kg

mg/kg = milligram(s) per kilogram

Reporting Limit (mg/kg) : 0.5 (Method I); 3 (Method II)

Reporting Limit (mg/kg) : 0.5 (Method I); 0.5 (Method II) <For 0-3 years>

Remark:

- Ageing test: ISO 10195:2018 Method A2



**BUREAU
VERITAS**

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APPENDIX

List of Alkylphenols :					
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Octylphenol (OP)	Various (140-66-9, 27193-28-8, 1806-26-4)	2	Nonylphenol (NP)	Various (25154-52-3, 104-40-5, 84852-15-3, 11066-49-2)
CAS-No. = Chemical Abstracts Service registry number					

List of Alkylphenol Ethoxylates :					
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Octylphenolethoxylates (OPEOs)	Various (9002-93-1, 9036-19-5, 68987-90-6)	2	Nonylphenolethoxylates (NPEOs)	Various (9016-45-9, 26027-38-3, 127087-87-0, 37205-87-1, 68412-54-4)
CAS-No. = Chemical Abstracts Service registry number					

List of Amines in Azo Dyestuff :					
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	4-Aminodiphenyl	92-67-1	13	4,4'-Methylenedi-o-toluidine (3,3'-Dimethyl- 4,4'-diaminodiphenylmethane)	838-88-0
2	Benzidine	92-87-5	14	p-Cresidine	120-71-8
3	4-Chloro-o-toluidine	95-69-2	15	4,4'-Methylene-bis-(2- chloraniline)	101-14-4
4	2-Naphthylamine	91-59-8	16	4,4'-Oxydianiline	101-80-4
5	o-Aminoazotoluene	97-56-3	17	4,4'-Thiodianiline	139-65-1
6	5-nitro-o-toluidine (2-Amino-4-nitrotoluene)	99-55-8	18	o-Toluidine	95-53-4
7	4-Chloroaniline (p-Chloroaniline)	106-47-8	19	4-Methyl-m-phenylenediamine (2,4-Toluenediamine)	95-80-7
8	4-Methoxy-m-phenylenediamine (2,4-Diaminoanisole)	615-05-4	20	2,4,5-Trimethylaniline	137-17-7
9	4,4'-Methylenedianiline (4,4'-Diaminodiphenylmethane)	101-77-9	21	o-Anisidine	90-04-0
10	3,3'-Dichlorobenzidine	91-94-1	22	4-Aminoazobenzene (p-Aminoazobenzene)	60-09-3
11	3,3'-Dimethoxybenzidine (o-Dianisidine)	119-90-4	23	2,4-Xylidine	95-68-1
12	3,3'-Dimethylbenzidine (4,4'-Bi-o-toluidine)	119-93-7	24	2,6-Xylidine	87-62-7

List of Organotin Compounds :					
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Dibutyltin (DBT)	1002-53-5	6	Tributyltin (TBT)	56573-85-4
2	Diocetyl tin (DOT)	15231-44-4	7	Triocetyl tin (TOT)	250252-89-2
3	Monobutyltin (MBT)	-	8	Triphenyltin (TPhT)	668-34-8
4	Trimethyltin (TMT)	1631-73-8	9	Tripropyltin (TPT)	-
5	Tricyclohexyltin (TCyHT)	6056-50-4	-	-	-
CAS-No. = Chemical Abstracts Service registry number					

END