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Our reference
20240930-008
Regular Service

Date
07/10/2024

Report no. 24.0.57097

Client : Dongguan Metro Clothing Co., Ltd.

Contact person : Frank
Tel: +86 13712816038

Receipt of material / sample : 30/09/2024

Order no. / Supplier : -

Country of Destination : US/UK

Country of Origin : China

Color /Category : Beige

End use : Hoodie

Sample description from client : Fabric

Test period : 30/09/2024 to 07/10/2024

Aim of Test(s) : Determination of banned azo colourants

The report comprises 4 pages.

The following material was submitted for the tests:

Sample	
1	Knitted fabric with plush, beige



1

RESULT

Determination of banned azo colourants

Method:

Liquid-liquid-extraction after reduction; Determination using HPLC-DAD and GC-MS(/MS)

Textiles: DIN EN ISO 14362-1: 2017-05^A and DIN EN ISO 14362-3: 2017-05^A

The following substances were included in the test:

CAS-No.	Substance	CAS-No.	Substance
92-67-1	4-Aminodiphenyl	838-88-0	3,3'-Dimethyl-4,4'-diaminodiphenylmethane
92-87-5	Benzidine		
95-69-2	4-Chloro-o-toluidine	120-71-8	p-Cresidine
91-59-8	2-Naphthylamine	101-14-4	4,4'-Methylene-bis-(2-chloro-aniline)
97-56-3 ¹⁾	o-Aminoazotoluene	101-80-4	4,4'-Oxydianiline
99-55-8 ²⁾	2-Amino-4-nitrotoluene	139-65-1	4,4'-Thiodianiline
106-47-8	p-Chloroaniline	95-53-4 ¹⁾	o-Toluidine
615-05-4	2,4-Diaminoanisole	95-80-7 ²⁾	2,4-Toluylenediamine
101-77-9	4,4'-Diaminodiphenylmethane	137-17-7	2,4,5-Trimethylaniline
91-94-1	3,3'-Dichlorobenzidine	90-04-0	o-Anisidine
119-90-4	3,3'-Dimethoxybenzidine	60-09-3 ³⁾	4-Aminoazobenzene
119-93-7	3,3'-Dimethylbenzidine	3165-93-3 ⁴⁾	4-Chloro-o-toluidiniumchloride
553-00-4 ⁵⁾	2-Naphthylammoniumacetate	39156-41-7 ⁶⁾	4-Methoxy-m-phenyldiamine sulfate
21436-97-5 ⁷⁾	2,4,5-Trimethylaniline Hydrochloride		
¹⁾	o-Aminoazotoluol (CAS-No. 97-56-3) is further reduced to o-Toluidine (CAS-No. 95-53-4).		
²⁾	2-Amino-4-nitrotoluene (CAS-No. 99-55-8) is further reduced to 2,4-Toluylenediamine (CAS-No. 95-80-7).		
³⁾	Azo colourants that are able to form 4-aminoazobenzene, generate under the condition of some above mentioned methods aniline and 1,4-phenylenediamine. For the detection of 4-aminoazobenzene therefore additional methods are carried out if necessary.		
⁴⁾	Is detected indirectly by analysis of 4-Chloro-o-toluidine.		
⁵⁾	Is detected indirectly by analysis of 2-Naphthylamine.		
⁶⁾	Is detected indirectly by analysis of 2,4-Diaminoanisole.		
⁷⁾	Is detected indirectly by analysis of 2,4,5-Trimethylaniline.		

Test result:

Sample	Detected substances in mg/kg
1 Knitted fabric with plush, beige	n.d.
Limit values according to Regulation (EC) No 1907/2006	Arylamines ≤ 30 mg/kg
Limit of quantitation	10 mg/kg
Note	n.d. = not detected
Further Notes: If necessary several test methods were carried out.	

CONCLUSION

The material passes all tested requirements.

Assistant Technical Supervisor



Delia Lee



Technical Manager



Willie Lau

The results relate only to the samples examined. The following decision rule applies to statements of conformity, unless required by law, standard or contractual agreement with the customer: ILAC G8:09/2019 4.2.1, w = 0 (simple acceptance rule). This report must only be reproduced in full and not in extract form. Use of the report in advertising or the publication of free interpretations of the results is only allowed with the express permission of Hohenstein. Only the authorized report is legally binding.

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