TEST REPORT

APPLICANT : YUYAO DANRUI TRADE CO., LTD

ADDRESS : 8TH FLOOR, SUNSHINE INTERNATIONAL BUILDING, NO55, YULI ROAD YUYAO,315400, ZHEJIANG, CHINA

SAMPLE DESCRIPTION : Winter Hat / DRD-4085

CLAIMED FIBRE CONTENT : 100% Acrylic

SAMPLE RECEIVED DATE : 03-Sep-2018

TURN AROUND TIME : 03-Sep-2018 to 07-Sep-2018

REVISE DATE : 10-Sep-2018

The following test item(s) was/were performed on selected sample(s) and/or component(s) confirmed by applicant

TEST REQUESTED	TEST METHOD/REGULATION	RESULT
Hexavalent Chromium (Cr VI)	REACH Annex XVII, Entry 47	Pass
Banned AZO Dyes	REACH Annex XVII, Entry 43	Pass
Total Cadmium Content	REACH Annex XVII, Entry 23	Pass
Total Lead Content	REACH Annex XVII, Entry 63	Pass
Allergic Disperse Dyes	DIN 54231:2005	See Test Result
Colorfastness to Washing	BS EN ISO 105-C06-2010	See Test Result

Note: This report cancels and supersedes report number EFSH18090110-CG-01 issued on Sep 7th, 2018. Modification description: As per client's request, added claimed fibre content information on the first page in the revised report.

Results obtained refer only to samples, products or material received in Laboratory, as described in point related to sample description, and tested in conditions shown in present report. Eurofins Product Testing Service (Shanghai) Co., Ltd ensures that this job has been performed according to our Quality System and complying contract and legal conditions. If you happen to have any comments, please do it by sending email to info.sh@eurofins.com and referring to this report number. Reproduction of this document is only valid if it is done completely and under the written permission of Eurofins Product Testing Service (Shanghai) Co., Ltd. If you happen to have any complaints, please do it by sending email to chinacomplaint@eurofins.com and referring to this report number.

********** FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S) **********

Signed for and on behalf of
Eurofins Product Testing Service (Shanghai) Co., Ltd

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Joyce Liu
Lab Manager

SAMPLE PHOTO

EFSH18090110-CG-32

TO BE CONTINUED

COMPONENT LIST

Component No.	Component
1	Orange fabric of hat

TO BE CONTINUED

TEST RESULT

Hexavalent Chromium (Cr VI)

Test Request: Hexavalent chromium (Cr VI) content as specified in entry 47 of annex XVII of REACH Regulation (EC) No 1907/2006.

Test Method: With reference to ISO 17075-1:2017, analyzed by UV-Vis Spectrophotometer.

Tested Item(s)	Unit	Limit	MDL	Result
				1
Hexavalent Chromium (CrVI)	mg/kg	3	3	ND

Remark:
mg/kg = milligram per kilogram
MDL = method detection limit
ND = Not detected, less than MDL

Shall not be placed on the market, or used, if Cement and cement-containing mixtures contain, when hydrated, more than 2 mg/kg (0,0002%) soluble chromium VI of the total dry weight of the cement.

Leather articles or articles containing leather parts, coming into contact with the skin, shall not be placed on the market, where they contain chromium VI in concentrations equal to or greater than 3mg/kg (0,0003% by weight) of the total dry weight of the leather or leather part.

TO BE CONTINUED

TEST RESULT

Banned AZO Dyes

Test Request: Banned AZO dyes as specified in entry 43 of annex XVII of REACH Regulation (EC) No 1907/2006.

Test Method: BS EN ISO 14362-1:2017,
5-60 mg/kg quantitative, >60 mg/kg semi quantitative.

Tested Item(s)	CAS No.	Unit	Limit	MDL	Result
					1
4-Aminobiphenyl	92-67-1	mg/kg	30	5	ND
4,4'-Benzidine	92-87-5	mg/kg	30	5	ND
4-Chloro-2-methylaniline	95-69-2	mg/kg	30	5	ND
2-Naphthylamine	91-59-8	mg/kg	30	5	ND
o-Aminoazotoluene (Note 1)	97-56-3	mg/kg	30	5	ND
5-Nitro-o-toluidine (Note 2)	99-55-8	mg/kg	30	5	ND
4-Chloroaniline	106-47-8	mg/kg	30	5	ND
4-Methoxy-1,3-phenylenediamine	615-05-4	mg/kg	30	5	ND
Bis-(4-aminophenyl)methane	101-77-9	mg/kg	30	5	ND
3,3'-Dichlorobenzidine	91-94-1	mg/kg	30	5	ND
3,3'-Dimethoxybenzidine	119-90-4	mg/kg	30	5	ND
3,3'-Dimethylbenzidine	119-93-7	mg/kg	30	5	ND
3,3'-Dimethyl-4,4'- diaminodiphenylmethane	838-88-0	mg/kg	30	5	ND
2-Methoxy-5-methylaniline	120-71-8	mg/kg	30	5	ND
4,4'-Methylene bis(o-chloroaniline)	101-14-4	mg/kg	30	5	ND
4,4'-Oxydianiline	101-80-4	mg/kg	30	5	ND
4,4'-Thiodianiline	139-65-1	mg/kg	30	5	ND
o-Tolidine	95-53-4	mg/kg	30	5	ND
2,4-Diaminotoluene	95-80-7	mg/kg	30	5	ND
2,4,5-Trimethylaniline	137-17-7	mg/kg	30	5	ND
o-Anisidine	90-04-0	mg/kg	30	5	ND
4-Amino-azobenzene (Note 3)	60-09-3	mg/kg	30	5	ND

Remark:
mg/kg = milligram per kilogram
MDL = method detection limit
ND = Not detected, less than MDL

Note 1: o-Aminoazotoluene(CAS No.:97-56-3) is reduced to o-Toluidine(CAS No.:95-53-4) and quantified by this.
Note 2: 5-Nitro-o-toluidine(CAS No.:99-55-8) is reduced to 4-Methyl-m-phenylene Diamine (CAS No.:95-80-7) and quantified by this.
Note 3: 4-Amino-azobenzene(CAS No.:60-09-3) is reduced to aniline and 1,4-phenylenediamine. Need further confirmation when aniline and 1,4-phenylenediamine are detected.
As per client's request, only the appointed materials have been tested.

TO BE CONTINUED

TEST RESULT

Total Cadmium Content

Test Request: Total cadmium content as specified in Commission Regulation (EU) 2016/217 amending entry 23 of Annex XVII of REACH Regulation (EC) No 1907/2006.

Test Method: EPA 3050B:1996, EPA 3052:1996, EN 1122:2001 Method B, acid digestion method was used and total cadmium content was determined by ICP-OES.

Tested Item(s)	Unit	Limit	MDL	Result
				1
Total Cadmium(Cd)	%	0.01	0.0005	ND

Remark:
MDL = method detection limit
ND = Not detected, less than MDL
As per client's request, only the appointed materials have been tested.

TO BE CONTINUED

TEST RESULT

Total Lead Content

Test Request: Total lead content as specified in entry 63 of annex XVII of REACH Regulation (EC) No 1907/2006 and its amendment Regulation (EU) No 2015/628.

Test Method: EPA 3050B:1996, EPA 3051A:2007, EPA 3052:1996
Acid digestion/ microwave digestion method was used and total lead content was determined by ICP-OES.

Tested Item(s)	Unit	Limit	MDL	Result
				1
Total Lead(Pb)	%	0.05	0.001	ND

Remark:
MDL = method detection limit
ND = Not detected, less than MDL
As per client's request, only the appointed materials have been tested.

TO BE CONTINUED

TEST RESULT

Allergic Disperse Dyes

Test Request: Allergic disperse dyes content as per clients request.

Test Method: DIN 54231:2005, solvent extraction and determination by High Performance Liquid Chromatography (HPLC/DAD) and High Performance Liquid Chromatographic Mass Spectrometer (HPLC/MS).

Tested Item(s)	CAS No.	Unit	Limit	MDL	Result
					1
C.I. Disperse Blue 1	2475-45-8	mg/kg	-	15	ND
C.I. Disperse Blue 3	2475-46-9	mg/kg	-	15	ND
C.I. Disperse Blue 7	3179-90-6	mg/kg	-	15	ND
C.I. Disperse Blue 26	3860-63-7	mg/kg	-	15	ND
C.I. Disperse Blue 35	12222-75-2	mg/kg	-	15	ND
C.I. Disperse Blue 102	12222-97-8	mg/kg	-	15	ND
C.I. Disperse Blue 106	12223-01-7	mg/kg	-	15	ND
C.I. Disperse Blue 124	61951-51-7	mg/kg	-	15	ND
C.I. Disperse Brown 1	23355-64-8	mg/kg	-	15	ND
C.I. Disperse Orange 1	2581-69-3	mg/kg	-	15	ND
C.I. Disperse Orange 3	730-40-5	mg/kg	-	15	ND
C.I. Disperse Orange 37/76	-	mg/kg	-	15	ND
C.I. Disperse Red 1	2872-52-8	mg/kg	-	15	ND
C.I. Disperse Red 11	2872-48-2	mg/kg	-	15	ND
C.I. Disperse Red 17	3179-89-3	mg/kg	-	15	ND
C.I. Disperse Yellow 1	119-15-3	mg/kg	-	15	ND
C.I. Disperse Yellow 3	2832-40-8	mg/kg	-	15	ND
C.I. Disperse Yellow 9	6373-73-5	mg/kg	-	15	ND
C.I. Disperse Yellow 39	12236-29-2	mg/kg	-	15	ND
C.I. Disperse Yellow 49	54824-37-2	mg/kg	-	15	ND
C.I. Disperse Orange 149	85136-74-9	mg/kg	-	15	ND
C.I. Disperse Yellow 23	6250-23-3	mg/kg	-	15	ND

Remark:
mg/kg = milligram per kilogram
MDL = method detection limit
ND = Not detected, less than MDL
"-" = Not Regulated
As per client's request, only the appointed materials have been tested.

TO BE CONTINUED

TEST RESULT

Colorfastness to Washing

BS EN ISO 105-C06-2010,Test No: A2S, 30-min mechanical wash at 40°C in 0.4% ECE detergent and 0.1% sodium perborate solution with 10 steel balls

	1	Requirement:
Colour Change	4-5	/
Cross Staining	5	/
Colour Staining on		
Acetate	4-5	/
Cotton	4-5	/
Nylon	4-5	/
Polyester	4-5	/
Acrylic	4-5	/
Wool	4-5	/

Remark:

Grey Scale for Assessing Colour Change/Staining

Grade 5 negligible or no change or staining
Grade 4 slightly changed or stained
Grade 3 noticeably changed or stained
Grade 2 considerably changed or stained
Grade 1 much changed or stained

As per client's request, only the appointed materials have been tested.

END OF THE REPORT