

TEST REPORT

APPLICANT : Xindao B.V.

ADDRESS : P.O. Box 3082, 2280 GB, Rijswijk, The Netherlands

SAMPLE DESCRIPTION : Full fiberglass 23" storm umbrella

ITEM NO. : P850.21

COUNTRY OF ORIGIN : China

COUNTRY OF DESTINATION : Europe

SAMPLE RECEIVED DATE : 19-Oct-2015

TURN AROUND TIME : 19-Oct-2015 to 26-Oct-2015, 6 Working Days

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

TEST REQUESTED	TEST METHOD/REGULATION	RESULT
Total Cadmium Content	REACH Annex XVII, Entry 23	Pass
Banned AZO Dyes	REACH Annex XVII, Entry 43	Pass
Polycyclic Aromatic Hydrocarbons (PAHs)	REACH Annex XVII, Entry 50	Pass
Polycyclic Aromatic Hydrocarbons (PAHs)	German GS Specification document: AfPS GS 2014:01 PAK (PAK=PAHs)	Pass

Eurofins (Shanghai) contact information

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

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



Terric Ji
Lab Manager

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 sh.info@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.

SAMPLE PHOTO(S)**EFSH15100858-CG-01**

TO BE CONTINUED

COMPONENT LIST

Component No.	Component
1	Black plastic frame
2	Black foam handle
3	Light blue fabric
4	Black fabric
5	Green fabric
6	White fabric
7	Red fabric
8	Dark blue fabric

TO BE CONTINUED

TEST RESULT

Total Cadmium Content

Test Request: Total cadmium content as specified in Commission Regulation (EU) No 835/2012 amending entry 23 of Annex XVII of REACH Regulation (EC) No 1907/2006.

Test Method: EN 1122:2001 Method B, EPA 3050B:1996, EPA 3051A:2007, EPA 3052:1996
Acid digestion/ microwave digestion method was used and total cadmium content was determined by ICP-OES.

Tested Item(s)	Unit	Limit	MDL	Result	
				1	2
Total Cadmium(Cd)	%	0.01	0.0005	ND	ND

Remark:

MDL = method detection limit

ND = Not detected, less than MDL

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: EN 14362-1:2012, EN 14362-3:2012
5-60 mg/kg quantitative, >60 mg/kg semi quantitative
Determination by Gas Chromatography-Mass Selective Detection (GC-MSD) and Confirmation by High Performance Liquid Chromatographic Analysis (HPLC/DAD).

Tested Item(s)	CAS No.	Unit	Limit	MDL	Result
					3+4+5
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:

MDL = method detection limit

ND = Not detected, less than MDL

According to client's request, tests are combination tests. The experimental results are the total result of mixed samples.

Note 1: o-Aminoazotoluene(CAS No.:97-56-3) is been 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 been 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 detected as aniline. Need further confirmation when aniline is detected.

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: EN 14362-1:2012
5-60 mg/kg quantitative, >60 mg/kg semi quantitative
Determination by Gas Chromatography-Mass Selective Detection (GC-MSD) and Confirmation by High Performance Liquid Chromatographic Analysis (HPLC/DAD).

Tested Item(s)	CAS No.	Unit	Limit	MDL	Result
					6+7+8
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:

MDL = method detection limit

ND = Not detected, less than MDL

According to client's request, tests are combination tests. The experimental results are the total result of mixed samples.

Note 1: o-Aminoazotoluene(CAS No.:97-56-3) is been 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 been 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 detected as aniline. Need further confirmation when aniline is detected.

TO BE CONTINUED

TEST RESULT

Polycyclic Aromatic Hydrocarbons (PAHs)

Test Request: Polycyclic Aromatic Hydrocarbons (PAHs) content as specified in Regulation (EU) 2015/326 amending entry 50 of Annex XVII of REACH Regulation (EC) No 1907/2006.

Test Method: Solvent extraction and determination by Gas Chromatography Mass Spectrometry (GC-MS).

Tested Item(s)	CAS No.	Unit	Limit	MDL	Result
					1
For rubber or plastic will direct contact with skin and mouth.					
Benzo(a)anthracene	56-55-3	mg/kg	1	0.2	ND
Chrysene	218-01-9	mg/kg	1	0.2	ND
Benzo(b)fluoranthene	205-99-2	mg/kg	1	0.2	ND
Benzo(j)fluoranthene	205-82-3				
Benzo(k)fluoranthene	207-08-9	mg/kg	1	0.2	ND
Benzo(a)pyrene	50-32-8	mg/kg	1	0.2	ND
Dibenzo(a,h)anthracene	53-70-3	mg/kg	1	0.2	ND
Benzo(e)pyrene	192-97-2	mg/kg	1	0.2	ND

Remark:

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

TO BE CONTINUED

TEST RESULT

Polycyclic Aromatic Hydrocarbons (PAHs)

Test Request: 18 Polycyclic Aromatic Hydrocarbons in polymers (PAHs) according to German GS Specification document: AfPS GS 2014:01 PAK (PAK=PAHs)

Test Method: Solvent extraction and quantification by gas chromatography-mass selective detection (GC-MS) with respect to AfPS GS 2014:01 PAK (PAK=PAHs) requirement

Requirement: AfPS GS 2014:01 PAK (PAK=PAHs) requirement: Limits for PAHs in Toys under Directive 2009/48/EC and Other products under ProdSG, see table 1 on next page(s):

Parameter	CAS No.	Unit	Result
			1
Benzo(a)pyrene	50-32-8	mg/kg	ND
Benzo(e)pyrene	192-97-2	mg/kg	ND
Benzo(a)anthracene	56-55-3	mg/kg	ND
Benzo(b)fluoranthene	205-99-2	mg/kg	ND
Benzo(j)fluoranthene	205-82-3	mg/kg	ND
Benzo(k)fluoranthene	207-08-9	mg/kg	ND
Chrysene	218-01-9	mg/kg	ND
Dibenzo(a,h)anthracene	53-70-3	mg/kg	ND
Benzo(ghi)perylene	191-24-2	mg/kg	ND
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	ND
Sum of Acenaphthene, Acenaphthylene, Fluorene, Phenanthrene, Pyrene, Anthracene, Fluoranthene	-	mg/kg	ND
Naphthalene	91-20-3	mg/kg	ND
Sum 18 PAHs	-	mg/kg	ND
Summary to above mentioned requirement:	For Category 2 (Other products under ProdSG)		Pass

Remark:

mg/kg = milligram per kilogram
ND = not detected, less than 0.2 mg/kg

TO BE CONTINUED

TEST RESULT

Table 1

AfPS GS 2014:01 PAK (PAK=PAHs) requirement: Limits for PAHs in Toys under Directive 2009/48/EC and Other products under ProdSG.

Parameter	Unit	Category 1 Materials indented to be put in the mouth, or materials of toys for children with foreseeable skin contact for longer than 30 seconds (long-term skin contact)	Category 2 Materials not covered by category 1, with foreseeable skin contact for longer than 30 seconds (long-term skin contact) or short-term repetitive contact with the human skin		Category 3 Materials not covered by category 1 or 2 with foreseeable skin contact up to 30 seconds (short term skin contact)	
		-	Toys under Directive 2009/48/EC	Other products under ProdSG	Toys under Directive 2009/48/EC	Other products under ProdSG
Benzo(a)pyrene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Benzo(e)pyrene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Benzo(a)anthracene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Benzo(b)fluoranthene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Benzo(j)fluoranthene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Benzo(k)fluoranthene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Chrysene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Dibenzo(a,h)anthracene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Benzo(ghi)perylene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Indeno(1,2,3-cd)pyrene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Acenaphthene, Acenaphthylene, Fluorene, Phenanthrene, Pyrene, Anthracene, Fluoranthene	mg/kg	<1 Sum*	<5 Sum*	<10 Sum*	<20 Sum*	<50 Sum*
Naphthalene	mg/kg	<1	<2		<10	
Sum* 18 PAHs	mg/kg	<1	<5	<10	<20	<50

* = Only those PAH components are taken into account, which have been specified in the material over the 0.2 mg/kg.

*** END OF THE REPORT ***