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TEST REPORT

APPLICANT	:	Xindao B.V.
ADDRESS	:	P.O. Box 3082, 2280 GB, Rijswijk, The Netherlands
SAMPLE DESCRIPTION	:	Simplistic metal pen
ITEM NO.	:	P610.94
COUNTRY OF ORIGIN	:	China
COUNTRY OF DESTINATION	:	Europe
SAMPLE RECEIVED DATE	:	11-May-2017
TURN AROUND TIME	:	11-May-2017 to 16-May-2017

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
Total Lead Content	REACH Annex XVII, Entry 63	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

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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

Rex Young

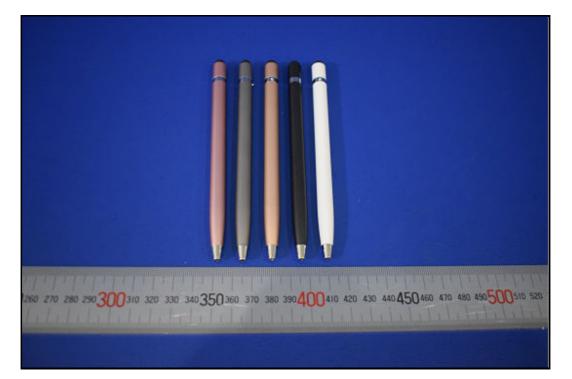
Rex Yang Assistant Chemical Lab Manager

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SAMPLE PHOTO



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COMPONENT LIST

Component No.	Component
1	Grey coating on metal (body)
2	Black coating on metal (body)
3	White coating on metal (body)
4	Pink coating on metal (body)
5	Dark skin color coating on metal (body)
6	Black soft plastic (body)



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	Unit Limit		Result			
rested item(s)	Unit	LIIIIIL	MDL	1+2+3	4+5	6	
Total Lead(Pb)	%	0.05	0.001	ND	0.00390	ND	

Remark:

MDL = method detection limit

ND = Not detected, less than MDL

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

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



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

Tested Item(s)	CAS No.	Unit	Limit	MDL	Result	
					6	
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	mg/kg	1	0.2	ND	
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

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



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 6
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
Conclusion:	For Category 2 (Other products under ProdSG)		Pass

Remark:

mg/kg = milligram per kilogram

ND = not detected, less than 0.2 mg/kg

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



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 intended long term skin contact (longer than 30s)	Category 2 Materials not covered by category 1, with foreseeable skin contact for longer than 30 seconds (long-term skin contact) or repeated short-term skin contact		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 ***