

Test Report

Report No. : AGC05443240618-001

SAMPLE NAME : LED flashlight torch

MODEL NAME : MO6591

APPLICANT: MID OCEAN BRANDS B.V

STANDARD(S) : Please refer to the following page(s).

DATE OF ISSUE : Jul. 04, 2024

Attestation of Global Compliance (Shenzhen) Std & Tech Co., Ltd.





Report No.: AGC05443240618-001 MID OCEAN BRANDS B.V

Address 7/F, Kings Tower, 111 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong. Test Site

6/F., Building 2, Sanwei Chaxi Industrial Park, Sanwei Community, Hangcheng Street,

Bao'an District, Shenzhen, Guangdong, China

Report on the submitted sample(s) said to be:

Sample Name LED flashlight torch

Model MO6591 Vendor code 115205 Country of Origin **CHINA** Country of Destination **EUROPE** Sample Received Date Jun. 18, 2024

Testing Period Jun. 18, 2024 to Jul. 04, 2024

Test Requested Selected test(s) as requested by client.

Test Requested: Conclusion

2011/65/EU (RoHS) and its amendment directive (EU) 2015/863 - Pb, Cd, Hg, Cr⁶⁺, PBBs, PBDEs, DBP, BBP, DEHP, DIBP

Pass

Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 50

- Polycyclic-aromatic Hydrocarbons (PAHs) Content

Pass

Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 43

- Aromatic Amines Azodyes (AZO) Content

Pass

- Colour fastness to rubbing

Pass

Approved by: Len

Suhongliang, Leon

Technical Director



Report Revise Record

Report No.: AGC0544324	0618-001
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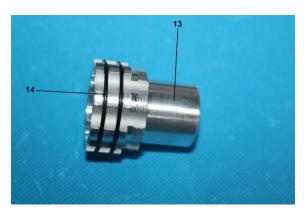
Report Version	Issued Date	Valid Version	Notes
/	Jul. 04, 2024	Valid	Initial release

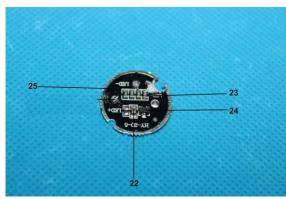


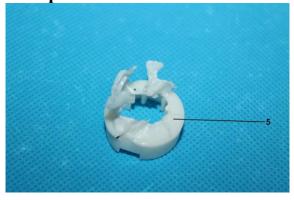
The photo of the sample

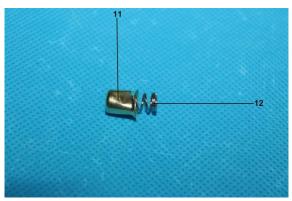


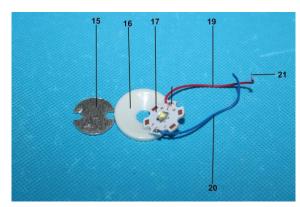


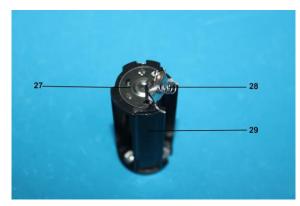




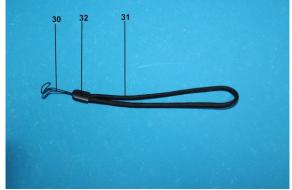


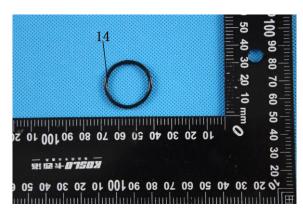


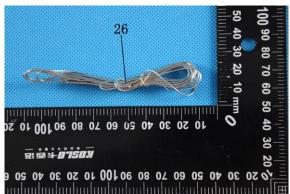




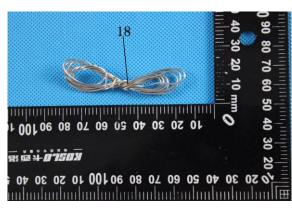














The photo of AGC05443240618-001 is for use only with the original report.

Test Point Description

Test point	Test module	Test parts	Test point description			
LED flashligh	LED flashlight torch Model: MO6591					
1			Transparent plastic lampshade			
2			Black metallic shell			
3		Outer shell	Black sealing ring			
4			Black silicone keypad			
5			Milk white plastic shell			
6		Vov	Black plastic shell			
7		Key	Metal spring			



		Keport No.: AGE03443240018-001
8		Milk white plastic button
9		Metal base
10		Metallic sheet
11	 	Copper metal cap
12	 	Metal spring
13	 	Silver aluminum shell
14	 	Black sealing ring
15		Silver metallic sheet
16		Milk white plastic shell
17		PCB
18	 Lamp board	Solder
19		Red wire jacket
20		Blue wire jacket
21		Conductor
22		Chip capacitor
23		Chip resistor
24	 Circuit board	Chip triode
25		PCB
26		Solder
27		Metallic sheet
28	 Battery rack	Metal spring
29		Black plastic stand
30		Black string
31	 Sling	Black thick rope
32		Black plastic buckle
1+32	 	Transparent plastic lampshade+Black plastic buckle

Note: "---" = The test point exists alone in the sample and is not attached to the test module or test parts.



Note: N.D.=Not Detected (less than method detection limit), MDL = Method Detection Limit, 1mg/kg=0.0001%

2011/65/EU (RoHS) and its amendment directive (EU) 2015/863

- Pb, Cd, Hg, Cr⁶⁺, PBBs, PBDEs, DBP, BBP, DEHP, DIBP

Test Item	Test Method/ Instrument	MDL	Maximum Limit
Lead (Pb)		/	1000mg/kg
Cadmium (Cd)		/	100mg/kg
Mercury (Hg)	IEC 62321-3-1:2013/ XRF	/	1000mg/kg
Total Chromium		/	/
Total Bromine		/	/
Chemistry Method		· · · · · · · · · · · · · · · · · · ·	<u>, </u>
Lead (Pb)	IEC 62321-5:2013/ ICP-OES	2mg/kg	1000mg/kg
Cadmium (Cd)	IEC 62321-5:2013/ ICP-OES	2mg/kg	100mg/kg
Mercury (Hg)	IEC 62321-4: 2013+A1:2017/ ICP-OES	2mg/kg	1000mg/kg
Non-metal: Hexavalent Chromium (Cr ⁶⁺)	IEC 62321-7-2:2017/ UV-Vis	8mg/kg	1000mg/kg
Metal: Hexavalent Chromium (Cr ⁶⁺)	IEC 62321-7-1:2015/ UV-Vis	0.1 μg/cm ²	/
Polybrominated Biphenyls (PBBs) -Monobromobiphenyl (MonoBB) -Dibromobiphenyl (DiBB) -Tribromobiphenyl (TriBB) -Tetrabromobiphenyl (TetraBB) -Pentabromobiphenyl (PentaBB) -Hexabromobiphenyl (HexaBB) -Heptabromobiphenyl (HeptaBB) -Octabromobiphenyl (OctaBB) -Nonabromodiphenyl (NonaBB) -Decabromodiphenyl (DecaBB)	IEC 62321-6:2015/ GC-MS	Single 5mg/kg	Sum 1000mg/kg
PolybrominatedDiphenylethers (PBDEs) -Monobromodiphenyl ether (MonoBDE) -Dibromodiphenyl ether (DiBDE) -Tribromodiphenyl ether (TriBDE) -Tetrabromodiphenyl ether (TetraBDE) -Pentabromodiphenyl ether (PentaBDE) -Hexabromodiphenyl ether (HexaBDE) -Heptabromodiphenyl ether (HeptaBDE) -Octabromodiphenyl ether (OctaBDE) -Nonabromodiphenyl ether (NonaBDE) -Decabromodiphenyl ether (DecaBDE)	IEC 62321-6:2015/ GC-MS	Single 5mg/kg	Sum 1000mg/kg
Di-iso-butyl phthalate (DIBP)		50mg/kg	1000mg/kg
Dibutyl phthalate (DBP)		50mg/kg	1000mg/kg
Butylbenzyl phthalate (BBP)	IEC 62321-8:2017/ GC-MS	50mg/kg	1000mg/kg
Di-(2-ethylhexyl) Phthalate (DEHP)		50mg/kg	1000mg/kg



Test point	Test Item		X-ray Fluorescence Spectrometry (XRF) mg/kg	Wet Chemistry Method mg/kg	C05443240618-0
]	Pb	BL	/	
	(Cd	BL	/	
	I	Нg	BL	/	
		Cr ⁶⁺)	BL	/	
1	Br	PBBs PBDEs	BL	/	Conformity
-	D	IBP	N/A	N.D.	
		BP	N/A	N.D.	
-		BP	N/A	N.D.	
-		БР ЕНР	N/A	N.D.	
				N.D.	
_		Pb	BL	/	
_		Cd T-	BL	/	
-		<u>Ig</u>	BL	/	
_	Cr(Cr ⁶⁺)	BL	/	
2	2 Br	PBBs PBDEs	N/A	/	Conformity
	DIBP		N/A	/	
	DBP		N/A	/	
	BBP		N/A	/	
	DEHP		N/A	/	
	Pb		BL	/	
	Cd		BL	/	
	Hg		BL	/	
	$Cr(Cr^{6+})$		BL	/	
3	Br	PBBs PBDEs	BL	/	Conformity
	D	IBP	N/A	N.D.	
_		BP	N/A	N.D.	
_			N/A	N.D.	
_	BBP DEHP		N/A	N.D.	
		2b	BL	/	
-		Cd	BL	/	
-		Ig	BL	/	
-		Cr ⁶⁺)	BL	/	
4	Br	PBBs	BL	/	Conformity
7	PBDEs			/	Comormity
	D	IBP	N/A	N.D.	
	D	BP	N/A	N.D.	
	В	BP	N/A	N.D.	
	DI	ЕНР	N/A	N.D.	



Test point	Tes	t Item	X-ray Fluorescence Spectrometry (XRF) mg/kg	Wet Chemistry Method mg/kg	Conclusion
		Pb	BL	/	
		Cd	BL	/	
		Hg	BL	/	
-		(Cr^{6+})	BL	/	
5	Br	PBBs	BL	/	Conformity
-	D	PBDEs	27/4	/	
-		IBP	N/A	N.D.	
-		OBP OBP	N/A	N.D.	
-		BBP	N/A	N.D.	
		EHP	N/A	N.D.	
<u>-</u>		Pb	BL	/	
-		Cd	BL	/	
_		Hg	BL	/	
_	Cr((Cr ⁶⁺)	BL	/	
6	Br	PBBs PBDEs	BL	/	Conformity
-	DIBP		N/A	N.D.	
-	DBP		N/A	N.D.	
	BBP		N/A	N.D.	
F	DEHP		N/A	N.D.	
	Pb		BL	/	
-	Cd		BL	/	
-	Hg		BL	/	
-	$Cr(Cr^{6+})$		BL	/	
7	Br	PBBs	N/A	/	Conformity
_		PBDEs	NT/A	/	
_		IBP	N/A	/	-
_)BP	N/A	/	
-		BBP	N/A	/	
		EHP	N/A	/	
-		Pb	BL	/	
-		Cd	BL	/	
-		Hg	BL	/	
	Cr((Cr ⁶⁺)	BL	/	
8	Br PBBs		BL	/	Conformity
	PBDEs			/	
		IBP	N/A	N.D.	
<u> </u>)BP	N/A	N.D.	
_		BBP	N/A	N.D.	
	D	EHP	N/A	N.D.	



Test point	Test Item		X-ray Fluorescence Spectrometry (XRF) mg/kg	Wet Chemistry Method mg/kg	C05443240618-00
]	Pb	BL	/	
	(Cd	BL	/	
	I	łg	BL	/	
	Cr(Cr ⁶⁺)	BL	/	
9	Br	PBBs PBDEs	N/A	/	Conformity
	D	IBP	N/A	/	
		BP	N/A	/	
		BP	N/A	/	
		EHP	N/A	/	
		Pb	BL	/	
		Cd	BL	/	
			BL	/	
		Cr ⁶⁺)	BL	/	
10	Br	PBBs PBDEs	N/A	/	Conformity
	DIBP		N/A	/	
_	DBP		N/A	/	
	BBP		N/A	/	
	DEHP		N/A	/	
	Pb		BL	/	
	Cd		BL	/	
	Hg		BL	/	
	$Cr(Cr^{6+})$		BL	/	
11	Br	PBBs PBDEs	N/A	/	Conformity
	D	IBP	N/A	/	
		BP	N/A	/	
		BP	N/A	/	
	DEHP		N/A	/	ı
		Pb	BL	/	
		Cd	BL	/	
	Hg		BL	/	1
	Cr(- <u>s</u> Cr ⁶⁺)	BL	/	
12	$ \begin{array}{c c} & \text{Cr}(\text{Cr}^{6^+}) \\ & \text{PBBs} \\ & & \text{PDPF} \end{array} $	PBBs	N/A	/	Conformity
_		PBDEs		/	Comermity
<u> </u>		IBP	N/A	/	
_		BP	N/A	/	
_		BP	N/A	/	
	DI	EHP	N/A	/	



Test point	Test Item		X-ray Fluorescence Spectrometry (XRF) mg/kg	Wet Chemistry Method mg/kg	C05443240618-0
	I	Pb	BL	/	
	(Cd	BL	/	
	F	łg	BL	/	
	Cr(Cr ⁶⁺)	BL	/	
13	Br	PBBs PBDEs	N/A	/	Conformity
	D	IBP	N/A	/	
		BP	N/A	/	
		BP	N/A	/	
		EHP	N/A	/	
		Pb	BL	/	
		Cd	BL	/	
		Ig	BL	/	
		Cr ⁶⁺)	BL	/	
14	Br	PBBs PBDEs	BL	/	Conformity
	DIBP		N/A	N.D.	
	DBP		N/A	N.D.	
	BBP		N/A	N.D.	
	DEHP		N/A	N.D.	
		Pb	BL	/	
	Cd		BL	/	
	Hg		BL	/	
	$Cr(Cr^{6+})$		BL	/	
15	Br	PBBs PBDEs	N/A	/	Conformity
	D	IBP	N/A	/	
		BP	N/A	/	
		BP	N/A	/	
	DEHP		N/A	/	
		Pb	BL	/	
		Cd	BL	/	
		I g	BL	/	
	Cr(Cr ⁶⁺)	BL	/	
16	Br	PBBs	BL	/	Conformity
<u> </u>	D1	l.	NT/A	,	-
<u> </u>					
<u> </u>					
_					
	D) D B	PBDEs IBP BP EHP	N/A N/A N/A N/A	/ N.D. N.D. N.D. N.D.	



Test point	Tes	t Item	X-ray Fluorescence Spectrometry (XRF) mg/kg	Wet Chemistry Method mg/kg	C05443240618-0 Conclusion
		Pb	BL	/	
		Cd	BL	/	
		Hg	BL	/	
		(Cr^{6+})	BL	/	
17	Br	PBBs	BL	/	Conformity
1,		PBDEs		/	
		IBP	N/A	N.D.	
	Ι	DBP	N/A	N.D.	
		BBP	N/A	N.D.	
	D	EHP	N/A	N.D.	
		Pb	BL	/	
		Cd	BL	/	
		Hg	BL	/	
	Cr	(Cr^{6+})	BL	/	
18	Br	PBBs PBDEs	N/A	/	Conformity
	DIBP		N/A	/	
-	DBP		N/A	/	
	BBP		N/A	/	
	DEHP		N/A	/	
	Pb		BL	/	
	Cd		BL	/	
			BL	/	
	Hg Cr(Cr ⁶⁺)		BL	/	
19	Br	PBBs	BL	/	Conformity
		PBDEs	27/4	/	
		IBP	N/A	N.D.	l
)BP	N/A	N.D.	
_		BBP	N/A	N.D.	
		EHP	N/A	N.D.	
		Pb	BL	/	
		Cd	BL	/	
	Hg		BL	/	
_	Cr	(Cr^{6+})	BL	/	
20	Br	PBBs	BL	/	Conformity
		PBDEs		/	
		IBP	N/A	N.D.	
)BP	N/A	N.D.	
	E	BBP	N/A	N.D.	
	D	ЕНР	N/A	N.D.	



Test point	Test Item		X-ray Fluorescence Spectrometry (XRF) mg/kg	Wet Chemistry Method mg/kg	C05443240618-00
	I	Pb	BL	/	
	(Cd	BL	/	
		łg	BL	/	
	Cr(Cr ⁶⁺)	BL	/	
21	Br	PBBs PBDEs	N/A	/	Conformity
	D	IBP	N/A	/	
		BP	N/A	/	
		BP	N/A	/	
		EHP	N/A	/	
		Pb	BL	/	
_		Cd	BL	/	
-		Ig	BL	/	
		Cr ⁶⁺)	BL	/	
22	Br	PBBs PBDEs	BL	/	Conformity
	DIBP		N/A	N.D.	
-	DBP		N/A	N.D.	
	BBP		N/A	N.D.	
	DEHP		N/A	N.D.	
	Pb		BL	/	
	Cd		BL	/	
	Hg		BL	/	
	$Cr(Cr^{6+})$		BL	/	
23	Br	PBBs PBDEs	BL	/	Conformity
	D	IBP	N/A	N.D.	
		BP	N/A	N.D.	
		BP	N/A	N.D.	
		EHP	N/A	N.D.	
		Pb	BL	/	
		Cd	BL	/	
		Ig	BL	/	
		Cr ⁶⁺)	BL	/	
24	Br	PBBs PBDEs	BL	/	Conformity
 	ות	IBP	N/A	N.D.	-
 		BP	N/A	N.D.	
 		BP	N/A	N.D.	
 		EHP	N/A	N.D.	



Test point	Test Item		X-ray Fluorescence Spectrometry (XRF) mg/kg	Wet Chemistry Method mg/kg	C05443240618-00
	I	Pb	BL	/	
	(Cd	BL	/	
		łg	BL	/	
	Cr(Cr ⁶⁺)	BL	/	
25	Br	PBBs PBDEs	BL	/	Conformity
	Di	IBP	N/A	N.D.	
		BP	N/A	N.D.	
		BP	N/A	N.D.	
	DH	ЕНР	N/A	N.D.	
	I	Pb	BL	/	
		Cd	BL	/	
	ŀ	łg	BL	/	
		Cr ⁶⁺)	BL	/	
26	Br	PBBs PBDEs	N/A	/	Conformity
	DIBP		N/A	/	
	DBP		N/A	/	
	BBP		N/A	/	
	DEHP		N/A	/	
	Pb		BL	/	
	Cd		BL	/	
	Hg		BL	/	
	$Cr(Cr^{6+})$		BL	/	
27	Br	PBBs PBDEs	N/A	/	Conformity
	D	IBP	N/A	/	
		BP	N/A	/	
		BP	N/A	/	
	DEHP		N/A	/	
		Pb	BL	/	
		Cd	BL	/	
	Hg		BL	/	
	Cr(Cr ⁶⁺)	BL	/	
20		PBBs		/	Conformit
28	Br	PBDEs	N/A	/	Conformity
	D)	IBP	N/A	/	
	D	BP	N/A	/	
	В	BP	N/A	/	
	DE	ЕНР	N/A	/	



Test point	Tes	t Item	X-ray Fluorescence Spectrometry (XRF) mg/kg	Wet Chemistry Method mg/kg	C05443240618-0
		Pb	BL	/	
		Cd	BL	/	
		Hg	BL	/	
	Cr((Cr ⁶⁺)	BL	/	
29	Br PBBs BL	/	Conformity		
	D	IBP	N/A	N.D.	
-)BP	N/A	N.D.	
-	Е	BBP	N/A	N.D.	
	D	ЕНР	N/A	N.D.	
		Pb	BL	/	
		Cd	BL	/	
]	Hg	BL	/	
		(Cr^{6+})	BL	/	
30	Br	PBBs PBDEs	BL	/	Conformity
	DIBP		N/A	N.D.	
-	DBP		N/A	N.D.	
	BBP		N/A	N.D.	
	DEHP		N/A	N.D.	
		Pb	BL	/	
		Cd	BL	/	
-]	Hg	BL	/	
-	Cr(Cr ⁶⁺)		BL	/	
31	Br	PBBs PBDEs	BL	/	Conformity
	D	IBP	N/A	N.D.	
	DBP BBP DEHP		N/A	N.D.	- - -
			N/A	N.D.	
-			N/A	N.D.	
		Pb	BL	/	
ļ		Cd	BL	/	
		Hg	BL	/	
ļ		(Cr^{6+})	BL	/	
32	Br PBBs PBDEs		IN	N.D.	Conformity
				124	
-	DIBP		N/A	N.D.	
-	DBP BBP DEHP		N/A	N.D.	
<u> </u>			N/A	N.D.	
			N/A	N.D.	



Remark: The samples of the following test points were resubmitted on July 02, 2024:18,26

Remark: The samples of test items DIBP, DBP, BBP and DEHP of the following test points were resubmitted on July 02, 2024:3,14

Element	Unit	Non-metal	Metal	Composite Material
Cd	mg/kg	BL≤70-3σ <x <130+3σ≤OL</x 	BL≤70-3σ <x <130+3σ≤OL</x 	BL≤50-3σ <x <150+3σ≤OL</x
Pb	mg/kg	BL≤700-3σ <x <1300+3σ≤OL</x 	BL≤700-3σ <x <1300+3σ≤OL</x 	BL≤500-3σ <x <1500+3σ≤OL</x
Hg	mg/kg	BL≤700-3σ <x <1300+3σ≤OL</x 	BL≤700-3σ <x <1300+3σ≤OL</x 	BL≤500-3σ <x <1500+3σ≤OL</x
Cr	mg/kg	BL≤700-3σ <x< td=""><td>BL≤700-3σ<x< td=""><td>BL≤500-3σ<x< td=""></x<></td></x<></td></x<>	BL≤700-3σ <x< td=""><td>BL≤500-3σ<x< td=""></x<></td></x<>	BL≤500-3σ <x< td=""></x<>
Br	mg/kg	BL≤300-3σ <x< td=""><td>N/A</td><td>BL≤250-3σ<x< td=""></x<></td></x<>	N/A	BL≤250-3σ <x< td=""></x<>

Remark:

- (1) BL= Below Limit, OL= Over limited, IN = Inconclusive, Scanning by XRF and detected by chemical method, N/A = Not applicable.
- (2) Results were obtained by XRF for primary scanning, and further chemical testing by ICP (for Cd, Pb, Hg), UV-Vis (for Cr(VI)) and GC-MS (for PBBs, PBDEs) are recommended to be performed, if the concentration exceeds the above warning value.
- (3) The XRF scanning test for RoHS elements The reading may be different to the actual content in the sample be of non-uniformity composition.
- (4) Boiling-water-extraction:(X represents the results of the tested sample)

Number	Colorimetric result (Cr(VI) concentration)	Judgement
1	$X < 0.1 \mu g/cm^2$	Negative
2	$0.1 \mu g/cm^2 \le X \le 0.13 \mu g/cm^2$	Uncertainty
3	$X > 0.13 \mu g/cm^2$	Positive

Negative indicates the absence of Cr(VI) on the tested areas concentration is below the limit of quantification. The coating is considered a non-Cr(VI) based coating.

Uncertainty indicates the absence of Cr(VI) on the tested areas unavoidable coating variations may influence the determination.

Positive indicates the presence of Cr(VI) on the tested areas concentration is above the limit of quantification and the statistical margin of error. The sample coating is considered to contain Cr(VI).

Storage conditions and production date of the tested sample are unavailable and thus result of Cr(VI) represent status of the sample at the time of testing.

(5) This XRF Scanning report is for reference purposes only. The applicant shall make its/his/her own judgment as to whether the information provided in this XRF screening report is sufficient for its/his/her purposes.

The result shown in this XRF scanning report will differ based on various factors, including but not limited to, the sample size, thickness, area, surface flatness, equipment parameters and matrix effect (e.g. plastic, rubber, metal, glass, ceramic etc.). Further wet chemical pre-treatment with relevant chemical equipment analysis are required to obtain quantitative data.



Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 50

- Polycyclic-aromatic Hydrocarbons (PAHs) Content

Test Methods and Equipment: Afps GS 2019:01 PAK; GC-MS

Tost Itom(s)	Unit	Limit	MDL	Test Result(s)	
Test Item(s)	Unit	Lillit	MIDL	1+32	4
Benzo[a]pyrene(BaP)	mg/kg	1	0.1	N.D.	N.D.
Benzo[e]pyrene(BeP)	mg/kg	1	0.1	N.D.	N.D.
Benzo[a]anthracene(BaA)	mg/kg	1	0.1	N.D.	N.D.
Benzo[b]fluoranthene(BbF)	mg/kg	1	0.1	N.D.	N.D.
Benzo[j]fluoranthene(BjFA)	mg/kg	1	0.1	N.D.	N.D.
Benzo[k]fluoranthene(BkF)	mg/kg	1	0.1	N.D.	N.D.
Chrysene(CHR)	mg/kg	1	0.1	N.D.	N.D.
Dibenzo[a,h]anthracene(DBA)	mg/kg	1	0.1	N.D.	N.D.
Co.	Conformity	Conformity			

Remark:

1. As specified by client, the submitted samples were mixed to test, the test points: 1+32

Limit requirements of Polycyclic-aromatic Hydrocarbons (PAHs) (Unit: mg/kg)

Items	CAS No.	Extender oils or used for the production of tyres or parts of tyres	Any of their rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity	Toys, including activity toys, and childcare articles, any of their rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity
Benzo[a]pyrene(BaP)	50-32-8	≤ 1	≤ 1	≤ 0.5
Benzo[e]pyrene(BeP)	192-97-2	/	≤ 1	≤ 0.5
Benzo[a]anthracene(BaA)	56-55-3	/	≤ 1	≤ 0.5
Benzo[b]fluoranthene(BbF)	205-99-2	/	≤ 1	≤ 0.5
Benzo[j]fluoranthene(BjFA)	205-82-3	/	≤ 1	≤ 0.5
Benzo[k]fluoranthene(BkF)	207-08-9	/	≤ 1	≤ 0.5
Chrysene(CHR)	218-01-9	/	≤ 1	≤ 0.5
Dibenzo[a,h]anthracene(DBA)	53-70-3	/	≤ 1	≤ 0.5
Sum of BaP+ BeP+ BaA+ BbF+ BjFA+ BkF+ CHR+ DBA	/	≤ 10	/	/

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

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Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 43

- Aromatic Amines Azodyes (AZO) Content

Test Methods and Equipment: EN ISO 14362-1:2017; GC-MS

Test Item(s)	Unit	Limit	MDL	Test Result(s)
4-Aminobiphenyl CAS:92-67-1	mg/kg	30	5	N.D.
Benzidine CAS:92-87-5	mg/kg	30	5	N.D.
4-Chloro-o-toluidine CAS:95-69-2	mg/kg	30	5	N.D.
2-Naphthylamine CAS:91-59-8	mg/kg	30	5	N.D.
o-Aminoazotoluene CAS:97-56-3	mg/kg	30	5	N.D.
5-Nitro-o-toluidine CAS:99-55-8	mg/kg	30	5	N.D.
p-Chloroaniline CAS:106-47-8	mg/kg	30	5	N.D.
4-Methoxy-m-phenylenediamine CAS:615-05-4	mg/kg	30	5	N.D.
4,4'-Diaminodiphenylmethane CAS:101-77-9	mg/kg	30	5	N.D.
3,3'-Dichlorobenzidine CAS:91-94-1	mg/kg	30	5	N.D.
3,3'-Dimethoxybenzidine CAS:119-90-4	mg/kg	30	5	N.D.
3,3'-Dimethybenzidine CAS:119-93-7	mg/kg	30	5	N.D.
4,4'-Methylenedi-o-toluidine CAS:838-88-0	mg/kg	30	5	N.D.
p-Cresidine CAS:120-71-8	mg/kg	30	5	N.D.
4,4'-Methylenebis[2-chloroaniline] CAS:101-14-4	mg/kg	30	5	N.D.
4,4'-Oxydianiline CAS:101-80-4	mg/kg	30	5	N.D.
4,4'-Thiodianiline CAS:139-65-1	mg/kg	30	5	N.D.
2-Aminotoluene CAS:95-53-4	mg/kg	30	5	N.D.
2,4-Toluylendiamine CAS:95-80-7	mg/kg	30	5	N.D.
2,4,5-Trimethylaniline CAS:137-17-7	mg/kg	30	5	N.D.
o-Anisidine CAS:90-04-0	mg/kg	30	5	N.D.
4-Aminoazobenzene CAS:60-09-3	mg/kg	30	5	N.D.
CAS.00-07-3	Conformity			

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

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Note: 4-aminoazobenzene: The EN ISO 14362-1:2017 or ISO 17234-1:2020 methods will enable further cleavage of 4-aminoazobenzene to aniline and / or 1,4-phenylenediamine. If aniline and / or 1,4-phenylenediamine are detected, 4-aminoazobenzene shall be further determined by EN ISO 14362-3:2017 or ISO 17234-2:2011.

Colour fastness to rubbing

Test Method: ISO 105-X12:2016

Rubbing finger: Cylinder

The time of conditioning as well as the atmospheric conditions during testing: 21.0°C, 63%R.H., 4 hrs

The percentage of soak of wet rubbing cloth: 95%~100% The long direction of the specimen: Endwise/ Crossrange

	Test 1		
Test point	Colour fastness to	Conclusion	
	Dry rubbing	Wet rubbing	
31	4-5	4-5	Conformity
Limit (Client's Requirement)	≥2-3	≥2-3	/

Note:

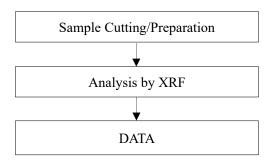
Colour Fastness Grade:

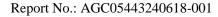
Grade 5 = No Colour Change (Best Grade)

Grade 1 = Colour Change Seriously (Bad Grade)

9 grades in gray sample card: 5, 4-5, 4, 3-4, 3, 2-3, 2, 1-2, 1.

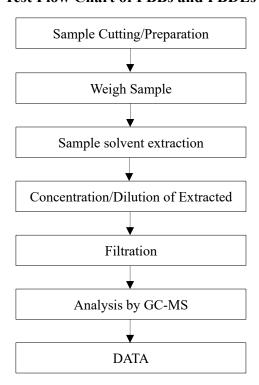
Test Flow Chart of XRF

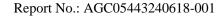






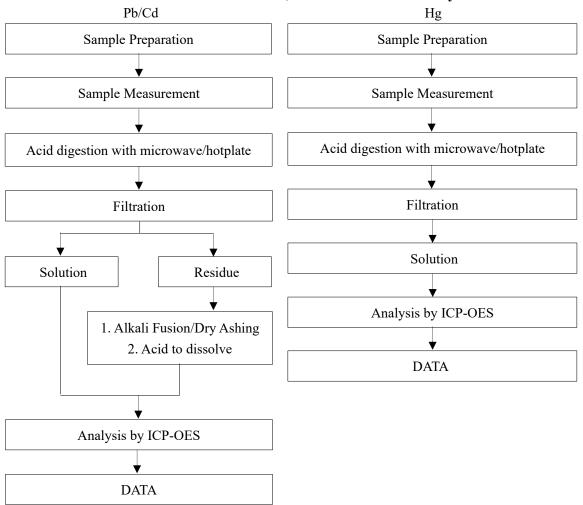
Test Flow Chart of PBBs and PBDEs



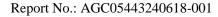




Test Flow Chart of Lead, Cadmium and Mercury

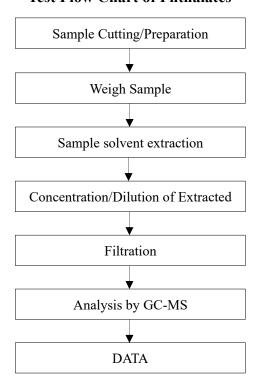


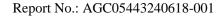
These sample were dissolved totally by pre-conditioning method according to above flow chart





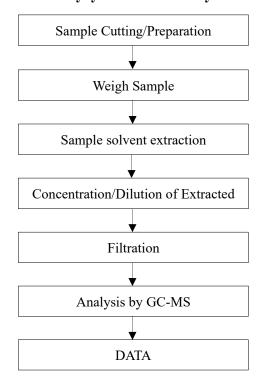
Test Flow Chart of Phthalates

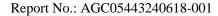






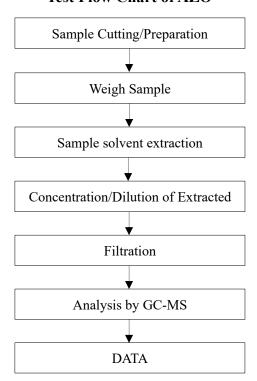
Test Flow Chart of Polycyclic-aromatic Hydrocarbons (PAHs)







Test Flow Chart of AZO





Conditions of Issuance of Test Reports

- 1. All samples and goods are accepted by the Attestation of Global Compliance (Shenzhen) Std & Tech Co., Ltd. (the "Company") solely for testing and reporting in accordance with the following terms and conditions. The company provides its services on the basis that such terms and conditions constitute express agreement between the company and any person, firm or company requesting its services (the "Clients").
- 2. Any report issued by Company as a result of this application for testing services (the "Report") shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, however, show or send it, or a certified copy thereof prepared by the Company to its customer, supplier or other persons directly concerned. The Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities, laws or court orders.
- 3. The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.
- 4. In the event of the improper use of the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.
- 5. Samples submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.
- 6. The Company will not be liable for or accept responsibility for any loss or damage however arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations. 7. Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.
- 8. The Company is not responsible for recalling the electronic version of the original report when any revision is made to them. The Client assumes the responsibility to providing the revised version to any interested party who uses them.
- 9. Subject to the variable length of retention time for test data and report stored hereinto as otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of the test report for a period of six years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after retention period. Under no circumstances shall we be liable for damage of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.

*** End of Report ***