

Test Report

Report No. : AGC05443250331-001

SAMPLE NAME : Metal torch key ring

MODEL NAME : MO8142

APPLICANT: MID OCEAN BRANDS B.V.

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

DATE OF ISSUE : Apr. 03, 2025

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





Applicant : 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 : Metal torch key ring

Model : MO8142

Vendor code : 111599

Country of Origin : CHINA

Country of Destination : EUROPE

Sample Received Date : Mar. 31, 2025

Testing Period : Mar. 31, 2025 to Apr. 02, 2025

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

Report No.: AGC05443250331-001

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

Pass

- Polycyclic-aromatic Hydrocarbons (PAHs) Content

Approved by: Len

Suhongliang, Leon

Technical Director



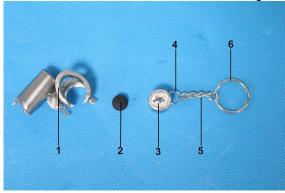
Report Revise Record

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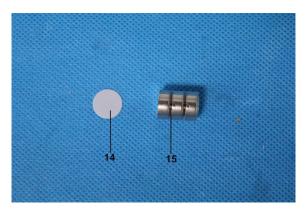
Report Version	Issued Date	Valid Version	Notes
/	Apr. 03, 2025	Valid	Initial release



The photo of the sample













The photo of AGC05443250331-001 is for use only with the original report.





Test point	Test module	Test parts	Test point description
Metal torch	key ring Model: M	08142	
1			Silver metallic shell
2			Black rubber button cap
3			White plastic button
4			Silver metal ring
5		Key ring	Silver metallic chain
6			Silver metal keychain
7			Silver metal wire
8			Silver metal guide ring
9			Silver plastic reflective shell
10			Metal spring
11		Circuit board	Solder
12		Circuit board	PCB
13			Transparent plastic lamp beads
14		Dattami	White plastic disc
15		Battery	Transparent plastic film
Difference			
16			Green metallic shell
17			Blue metallic shell
18			Black metallic shell

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% Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019/CNAS-GL015:2022.

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	-		
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	/
-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	Conclusion	
	F	Pb	BL	/		
	C	Cd	BL	/		
	H	Ig	BL	/		
	Cr(0	Cr ⁶⁺)	BL	/		
1	Br	PBBs	N/A	/	Camfamaita	
1	Bľ	PBDEs	IN/A	/	Conformity	
	DI	BP	N/A	/		
	D:	BP	N/A	/		
	B	BP	N/A	/		
	DE	EHP	N/A	/		
	F	Pb	BL	/		
	C	Cd	BL	/		
	H	Ig	BL	/		
	Cr(0	$\mathbb{C}r^{6+}$)	BL	/		
2	Br	PBBs	- BL	/	Conformity	
2		PBDEs		/	Conformity	
	DIBP		N/A	N.D.		
	DBP		N/A	N.D.		
	BBP		N/A	N.D.		
	DEHP		N/A	N.D.		
	F	P b	BL	/		
	(Cd	BL	/		
	Hg		BL	/		
	$Cr(Cr^{6+})$		BL	/		
3	Br	PBBs PBDEs	BL	/	Conformity	
	DI	BP	N/A	N.D.		
	D.	BP	N/A	N.D.		
		BP	N/A	N.D.		
		ЕНР	N/A	N.D.		
		P b	BL	/		
_		Cd	BL	/		
		Ig	BL	/		
		Cr ⁶⁺)	BL	/		
4		PBBs		/	G 6 ::	
4	Br	PBDEs	N/A	/	Conformity	
	DI	BP	N/A	/		
	D	BP	N/A	/		
		BP	N/A	/		
		ЕНР	N/A	/		

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Web: http://www.agccert.com/



Test point	Test Item		X-ray Fluorescence Spectrometry (XRF) mg/kg	Wet Chemistry Method mg/kg	C05443250331-0
		Pb	BL	/	
		Cd	BL	/	
		Hg	BL	/	
	Cr((Cr ⁶⁺)	BL	/	
5	Br	PBBs PBDEs	N/A	/	Conformity
	D	IBP	N/A	/	
-)BP	N/A	/	
-	В	BP	N/A	/	
-	D	ЕНР	N/A	/	
		Pb	BL	/	
		Cd	BL	/	
]	Hg	BL	/	
		(Cr ⁶⁺)	BL	/	
6	Br	PBBs PBDEs	N/A	/	Conformity
	DIBP		N/A	/	
	DBP		N/A	/	
	BBP		N/A	/	
	DEHP		N/A	/	
		Pb	BL	/	
<u> </u>	Cd		BL	/	
<u> </u>]	Hg	BL	/	
	$Cr(Cr^{6+})$		BL	/	
7	Br	PBBs PBDEs	N/A	/	Conformity
	D	IBP	N/A	/	
)BP	N/A	/	
		BP	N/A	/	
-		ЕНР	N/A	/	
		Pb	BL	/	
-		Cd	BL	/	
]	Hg	BL	/	
8		(Cr ⁶⁺)	BL	/	
	Br	PBBs PBDEs	N/A	/	Conformity
	D	IBP	N/A	/	
)BP	N/A	/	
		BP	N/A	/	
-		ЕНР	N/A	/	



Test point	Test Item		X-ray Fluorescence Spectrometry (XRF) mg/kg	Wet Chemistry Method mg/kg	C05443250331-00
	Pb		BL	/	
		Cd	BL	/	
		Hg	BL	/	
	Cr	(Cr ⁶⁺)	BL	/	
9	Br	PBBs	IN	N.D.	Conformity
9	DI	PBDEs	IIN	N.D.	Comorning
	D	IBP	N/A	N.D.	
	Γ)BP	N/A	N.D.	
	E	BBP	N/A	N.D.	
	D	EHP	N/A	N.D.	
		Pb	BL	/	
	ı	Cd	BL	/	
		Hg	BL	/	
	Cr	(Cr^{6+})	BL	/	
10	0 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	/	
		BBP	N/A	/	
		ЕНР	N/A	/	
		Pb	BL	/	
		Cd	BL	/	
		Hg	BL	/	
12		(Cr ⁶⁺)	BL	/	
	Br	PBBs PBDEs	BL	/	Conformity
	n	IBP	N/A	N.D.	
)BP	N/A	N.D.	
		BBP	N/A	N.D.	
		ЕНР	N/A	N.D.	
	D	PIII	1 N/ F1	Ŋ.D.	



Test point	point Test Item		Test Item X-ray Fluorescence Spectrometry (XRF) mg/kg		Report No.: AG Wet Chemistry Method mg/kg	Conclusion	
]	Pb	BL	/			
	(Cd	BL	/			
		Hg	BL	/			
	Cr(Cr ⁶⁺)	BL	/			
13	Br	PBBs	IN	N.D.	Conformity		
13	DI	PBDEs	IIN	N.D.	Comornity		
	D	IBP	N/A	N.D.			
	D	BP	N/A	N.D.			
	В	BP	N/A	N.D.			
	DI	EHP	N/A	N.D.			
]	Pb	BL	/			
	(Cd	BL	/			
		I g	BL	/			
	Cr(Cr ⁶⁺)	BL	/			
14		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	/			
			BL	/			
	$Cr(Cr^{6+})$		BL	/			
15	Br	PBBs PBDEs	BL	/	Conformity		
_	D	IBP	N/A	N.D.			
_		BP	N/A	N.D.	1		
			N/A	N.D.			
_	BBP DEHP		N/A	N.D.			
		2b	BL	N.D.			
_		Cd	BL	/			
		-Ig	BL	/			
		Cr ⁶⁺)	BL	/			
	Cr(PBBs	DL	/			
16	Br	PBDEs	N/A	/	Conformity		
-	D.	IBP	N/A	/			
-				/			
-		BP	N/A	/			
<u> </u>		BP EHP	N/A N/A	/			



Test point Test Item Pb Cd		b	X-ray Fluorescence Spectrometry (XRF) mg/kg BL BL	Wet Chemistry Method mg/kg	Conclusion	
-		Ig	BL	/		
		Cr ⁶⁺)	BL	/		
17	Br	PBBs PBDEs	N/A	/	Conformity	
	DIBP		N/A	/		
	DBP		N/A	/		
	BBP		N/A	/		
	DEHP		N/A	/		
	Pb		BL	/		
	Cd		BL	/		
	Hg Cr(Cr ⁶⁺)		BL	/		
			BL	/		
18	D.,,	PBBs	NT/A	/	Conformity	
	Br	PBDEs	N/A	/	Conformity	
	DIBP		N/A	/		
	D	BP	N/A	/		
	В	BP	N/A	/		
	DE	НР	N/A	/		

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)

` '	` 1	1 /
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

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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

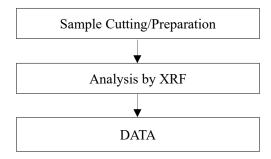
Test Item(s)	Unit	Limit	MDL	Test Result(s)	
Test Item(s)	Oilit			2	13
Benzo[a]pyrene (BaP)	mg/kg	1	0.1	N.D.	N.D.
Benzo[e]pyrene (BeP)	mg/kg	1	0.1	N.D.	N.D.
Benzo[a]anthracene (BaA)	mg/kg	1	0.1	N.D.	N.D.
Benzo[b]fluoranthene (BbF)	mg/kg	1	0.1	N.D.	N.D.
Benzo[j]fluoranthene (BjFA)	mg/kg	1	0.1	N.D.	N.D.
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.
Conclu	sion			Conformity	Conformity

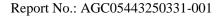


Limit requirements of Polycyclic-aromatic Hydrocarbons (PAHs) (Unit: mg/kg)

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	/	/

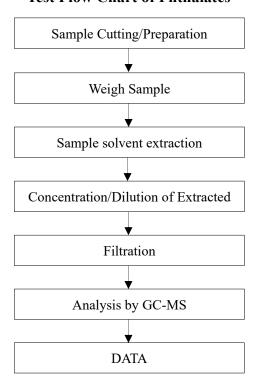
Test Flow Chart of XRF

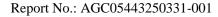






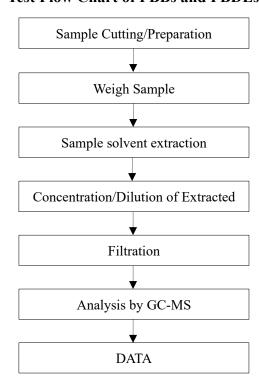
Test Flow Chart of Phthalates

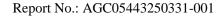






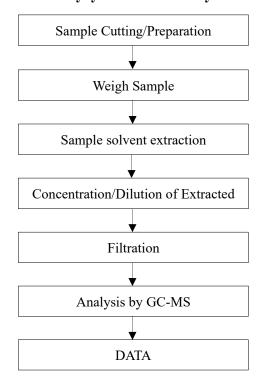
Test Flow Chart of PBBs and PBDEs







Test Flow Chart of Polycyclic-aromatic Hydrocarbons (PAHs)





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").
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- 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 ***