

# **Test Report**

Report No. : AGC05443240419-001

- SAMPLE NAME : Wood educational count game
- MODEL NAME : MO6398
- APPLICANT : MID OCEAN BRANDS B.V
- **STANDARD(S)** : Please refer to the following page(s).
- DATE OF ISSUE : Jun. 07, 2024









## : MID OCEAN BRANDS B.V

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

: 5,6/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	:	Wood educational count game
Model	:	MO6398
Vendor code	:	114276
Country of Origin	:	CHINA
Country of Destination	:	EUROPE
Labeled Age Grading	:	Not suitable for children under 3 years
Requested Age Grading	:	3+
Age Group Applied in Testing	:	3+
Sample receiving state	:	Normal
Sample Received Date	:	Apr. 12, 2024
Testing Period	:	Apr. 12, 2024 to Jun. 07, 2024
Test Requested	:	Selected test(s) as requested by client.

Approved by:

Suhongliang, Leon

**Technical Director** 

<b>AGC</b> <sup>®</sup>	Report No.: AGC05443240419-001
Test Requested:	Conclusion
European Standard on Safety of Toys - EN 71-1:2014+A1:2018: Mechanical and Physical Properties	Pass
European Standard on Safety of Toys - EN 71-2:2020: Flammability	Pass
The Directive 2009/48/EC-Safety of Toys - Labeling requirement (Washing/Cleaning Label, CE mark, importer / manufacture address), product identification)	er mark (name, Pass
European Standard on Safety of Toys - EN 71-3:2019+A1:2021: Migration of Certain Elements (Al, Sb, As, Ba, B, Cd, C Co, Cu, Pb, Mn, Hg, Ni, Se, Sr, Sn, Zn)	r(III), Cr(VI), Pass
European Standard on Safety of Toys - EN 71-3:2019+A1:2021: Migration of Certain Elements (Organic Tin)	Pass
Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 23 -Cadmium(Cd) Content	Pass
Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 51&52 - Phthalates Content	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 5 - Benzene Content	Pass
Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 43 - Aromatic Amines Azodyes (AZO) Content	Pass
Regulation (EU) 2019/1021 on persistent organic pollutants (POPs) - Pentachlorophenol (PCP) Content	Pass
- Formaldehyde Release	Pass
- Colour fastness to rubbing	Pass



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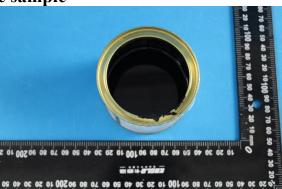
Report Version	Issued Date	Valid Version	Notes
/	Jun. 07, 2024	Valid	Initial release



# The photo of the sample

## Report No.: AGC05443240419-001





The photo of AGC05443240419-001 is for use only with the original report.

#### **Test Point Description**

Test point	Test point description
1-1	Khaki cloth
1-2	Khaki rope
1-3	Wooden blocks
1-4	Black coating
1-1+1-2	Khaki cloth+Khaki rope



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

## **European Standard on Safety of Toys**

#### - EN 71-1:2014+A1:2018: Mechanical and Physical Properties

Clause	Description	Result
4	GENERAL REQUIREMENTS	Pass
4.1	Material cleanliness	Pass
4.2	Assembly	N/A
4.3	Flexible plastics sheeting	N/A
4.4	Toy bags	Pass
4.5	Glass	N/A
4.6	Expanding materials	N/A
4.7	Edges	Pass
4.8	Points and metallic wires	Pass
4.9	Protruding parts	N/A
4.10	Parts moving against each other	N/A
4.10.1	Folding and sliding mechanisms	N/A
4.10.2	Driving mechanisms	N/A
4.10.3	Hinges	N/A
4.10.4	Springs	N/A
4.11	Mouth-actuated toys and other toys intended to be put in the mouth	N/A
4.12	Balloons	N/A
4.13	Cords of toy kites and other flying toys	N/A
4.14	Enclosures	N/A
4.14.1	Toys which a child can enter	N/A
4.14.2	Masks and helmets	N/A
4.15	Toys intended to bear the mass of a child	N/A
4.15.1	Toys propelled by a child or by other means	N/A
4.15.1.1	General	N/A
4.15.1.2	Warnings and instructions for use	N/A
4.15.1.3	Strength	N/A
4.15.1.4	Stability	N/A
4.15.1.5	Braking	N/A
4.15.1.6	Transmission and wheel arrangement	N/A
4.15.1.7	Adjustable seat pillar and handlebar stem minimum insertion marks	N/A
4.15.1.8	Electrically-driven ride-on toys	N/A
4.15.2	Toy bicycles	N/A
4.15.2.1	General	N/A
4.15.2.2	Warnings and instructions for use	N/A
4.15.2.3	Braking requirements	N/A
4.15.3	Rocking horses and similar toys	N/A
4.15.4	Toys not propelled by a child	N/A
4.15.5	Toy scooters	N/A
4.15.5.1	General	
4.15.5.2	Warnings and instructions for use	N/A
4.15.5.3	Strength	N/A
4.15.5.4	Adjustable and folding steering tubes	N/A
4.15.5.5	Braking	N/A

4.15.5.6	Report No.: AGC054     Wheel size	N/A
4.15.5.7	Protruding parts	N/A N/A
4.16	Heavy immobile toys	N/A
4.17	Projectiles	N/A N/A
4.17.1	General	IN/A
4.17.2	All projectiles	N/A
4.17.2.1	Leading parts	N/A N/A
4.17.2.2	01	N/A N/A
4.17.2.3	Foam shaft projectiles with a suction cup as a leading part         Other types of projectile with a suction cup as a leading part	N/A N/A
		N/A N/A
4.17.3 4.17.3.1	Projectile toys with stored energy	N/A N/A
	Energy limitation	
1.17.3.2	Edges	N/A
1.17.3.3	Projectiles with a protective cap, cover or tip	N/A
1.17.3.4	Impact resistance	N/A
.17.3.5	Improvised projectiles	N/A
1.17.4	Certain projectile toys without stored energy	N/A
1.17.4.1	Darts	N/A
1.17.4.2	Bows and arrows	N/A
1.17.4.3	Toy catapults and projectiles propelled by an elastic band	N/A
1.17.4.4	Projectile toys without stored energy where the discharge mechanism can store energy, only when held in place by the user	N/A
1.18	Aquatic toys and inflatable toys	N/A
.19	Percussion caps specifically designed for use in toys and toys using percussion caps	N/A
.20	Acoustics	N/A
4.21	Toys containing a non-electrical heat source	N/A
1.22	Small balls	N/A
1.23	Magnets	N/A
1.23.1	General	
1.23.2	Toys other than magnetic/electrical experimental sets intended for children over 8 years	N/A
1.23.3	Magnetic/electrical experimental sets intended for children over 8 years	N/A
1.24	Yo-yo balls	N/A
1.25	Toys attached to food	N/A
1.26	Toy Disguise Costumes	N/A
1.20 1.27	Flying toys	N/A
.27.1	General	N/A
4.27.2	Rotors and propellers on flying toys	N/A
1.27.3	Rotors and propeners on remote controlled flying toys	N/A
5	TOYS INTENDED FOR CHILDREN UNDER 36 MONTHS	N/A N/A
5.1	General requirements	N/A N/A
5.2		
5.3	Filling materials	N/A
	Plastic sheeting	N/A
5.4	Cords, chains and electrical cables in toys	N/A
5.4.1	General	 NT/A
5.4.2	Cords and chains in toys intended for children under 18 months	N/A
5.4.2.1	Cords and chains with the potential to tangle	N/A
5.4.2.2	Two cords or chains with the potential to tangle	N/A
5.4.2.3	Separated cords and chains	N/A
5.4.2.4	Free length of cords and chains	N/A
5.4.3	Cords and chains in toys intended for children of 18 months or over but under 36 months	N/A
5.4.3.1	Cords and chains with the potential to tangle	N/A
5.4.3.2	Two cords or chains with the potential to tangle	N/A
5.4.3.3	Separated cords and chains	N/A

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5.4.3.4	Report No.: AGC Free length of cords and chains	N/A
.4.3.5	Cords and chains not suitable for children under 18 months	N/A N/A
.4.4	Fixed loops, tangled loops and nooses	N/A
.4.5	Cords and chains on pull along toys	N/A
.4.6	Electrical cables	N/A
.4.7	Cross-sectional dimension of certain cords	N/A
.4.8	Self-retracting cords	N/A
.4.9	Toys attached to or intended to be strung across a cradle, cot or perambulator	N/A
.4.9.1	Toys intended to be strung across a cradle, cot or perambulator	N/A
.4.9.2	Toys otherwise intended to be attached to a cradle, cot or perambulator	N/A
.5	Liquid-filled toys	N/A
.6	Speed limitation of electrically driven toys	N/A
.7	Glass and porcelain	N/A
.8	Shape and size of certain toys	N/A
.9	Toys comprising monofilament fibres	N/A
.10	Small balls	N/A
.10	Play figures	N/A
.12	Hemispheric-shaped toys	N/A
.13	Suction cups	N/A
.14	Straps intended to be worn fully or partially around the neck	N/A
.15	Sledges with cords for pulling	N/A
	PACKAGING	N/A
1	Warnings, markings and instructions for use	Pass
7.1	General	Pass
7.2	Toys not intended for children under 36 months	Pass
7.3	Latex balloons	N/A
'.4	Aquatic toys	N/A
<i>'</i> .5	Functional toys	N/A
.6	Hazardous sharp functional edges and points	N/A
.7	Projectile toys	N/A
.8	Imitation protective masks and helmets	N/A
.9	Toy kites	N/A
.10	Roller skates, inline skates, skateboards and certain other ride-on toys	N/A
.10.1	Roller skates, inline skates and skateboards	N/A
.10.2	Ride-on toys without a braking device	N/A
.10.3	Electrically-driven ride-on toys	N/A
.10.4	Instructions for use	N/A
.11	Toys intended to be strung across a cradle, cot, or perambulator	N/A
.12	Liquid-filled teethers	N/A
.13	Percussion caps specifically designed for use in toys	N/A
.14	Acoustics	N/A
.15	Toy bicycles	N/A
.16	Toys intended to bear the mass of a child	N/A
.17	Toys comprising monofilament fibres	N/A
.18	Toy scooters	N/A
.19	Rocking horses and similar toys	N/A
.20	Magnetic/electrical experimental sets	N/A
.21	Toys with electrical cables exceeding 300 mm in length	N/A
.22	Toys with cords or chains intended for children of 18 months and over but under 36 months	N/A
.23	Toys intended to be attached to a cradle, cot or perambulator	N/A
.24	Sledges with cords for pulling	N/A

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AC	<b>BC</b> <sup>®</sup>	Report No.: AGC05443240419-001
7.25	Flying toys	N/A
7.25.1	Flying toys	N/A
7.25.2	Remote controlled flying toys	N/A
7.26	Improvised projectiles	N/A

Clause	Test Method	Result
8.3	Torque Test	Pass
8.4	Tension test	Pass
8.5	Drop Test	Pass
8.7	Impact Test	N/A
8.8	Compression Test	N/A
8.13	Flexibility of wires	N/A

## **European Standard on Safety of Toys**

<u>- EN 71-2:2020: Flammability</u>			
Clause	Requirements	Result	
4	Requirements	Pass	
4.1	General	Pass	
4.2	Toys to be worn on the head	N/A	
4.2.1	General		
4.2.2	Beards, moustaches, wigs, etc, made from hair, pile or material with similar features (e.g. freehanging ribbons, paper or cloth strands), which protrude more than or equal to 50 mm from the surface of the toy	N/A	
4.2.3	Beards, moustaches, wigs etc. made from hair, pile or material with similar features (e.g. freehanging ribbons, paper or cloth strands etc.), which protrude less than 50 mm from the surface of the toy	N/A	
4.2.4	Full or partial moulded head masks	N/A	
4.2.5	Flowing elements of toys to be worn on the head (except those covered by 4.2.2 and 4.2.3), hoods, head-dresses etc. and fabric masks which partially or fully cover the head, but excluding those items covered by 4.3	N/A	
4.4	Toys intended to be entered by a child	N/A	
4.5	Soft Filled Toys (animals and dolls, etc) with a piled or textile surface	N/A	

## The Directive 2009/48/EC-Safety of Toys

## <u>- Labeling requirement (Washing/Cleaning Label, CE mark, importer / manufacturer mark (name, address),</u> product identification)

	On product	On packaging
Washing/Cleaning instruction	N/A	N/A
CE marking	Absent	Present
Manufacturer's name	Absent	Absent
Manufacturer's address	Absent	Absent
Importer's name	Absent	Present
Importer's address	Absent	Present
Sample ID	Absent	Present
Domark 1:		

Remark 1:

Washing/Cleaning label: According to Directive 2009/48/EC the following safety requirements apply regarding cleaning and washing: A toy intended for use by children under 36 months must be designed and manufactured in such a way that it can be cleaned. A textile toy must, to this end, be washable, except if it contains a mechanism that may be damaged if soak washed. The toy must fulfill the safety requirements also after having been cleaned in accordance with this point and the manufacturer's instructions. The manufacturer should, if applicable, provide instructions on



how the toy has to be cleaned.

## Remark 2:

Toys made available on the market must bear the CE marking. The CE marking must be subject to the general principles set out in Article 30 of Regulation (EC) No 765/2008. The CE marking must be affixed visibly, legibly and indelibly to the toy, to an affixed label or to the packaging. In the case of small toys and toys consisting of small parts, the CE marking may alternatively be affixed to a label or an accompanying leaflet. Where, in the case of toys sold in counter displays, that is not technically possible, and on condition that the counter display was originally used as packaging for the toy, the CE marking may be affixed to the counter display. Where the CE marking is not visible from outside the packaging, if any, it shall as a minimum be affixed to the packaging. Where specific legislation does not impose specific dimensions, the CE marking must be at least 5 mm high.

Remark 3:

The manufacturer's name, registered trade name or registered trade mark and the address at which the manufacturer can be contacted must be indicated on the toy or, where that is not possible, on its packaging or in a document accompanying the toy. This requirement applies also to the name and address etc. of any importer

#### Remark 4:

Manufacturers must ensure that their toys bear a type, batch, serial or model number or other element allowing their identification, or where the size or nature of the toy does not allow it, that the required information is provided on the packaging or in a document accompanying the toy.

#### Note

Per the client's requirement, the testing age grading is 3+

N/A=Not Applicable; N/T=Not Tested; DNI = Did Not Ignite; IBSE = Ignite But Self-Extinguished; -- =No judgement required

#### **European Standard on Safety of Toys**

## - EN 71-3:2019+A1:2021: Migration of Certain Elements (Al, Sb, As, Ba, B, Cd, Cr(III), Cr(VI), Co, Cu, Pb, Mn,

#### Hg, Ni, Se, Sr, Sn, Zn)

Test Methods and Equipment: EN 71-3:2019+A1:2021; ICP-OES

Test Item (s)	Unit Limit	MDI	Test Result(s)		
Test Item(s)		Limit	MDL	1-1	1-2
Aluminium(Al)	mg/kg	28130	50	N.D.	N.D.
Antimony(Sb)	mg/kg	560	2.0	N.D.	N.D.
Arsenic(As)	mg/kg	47	0.5	N.D.	N.D.
Barium(Ba)	mg/kg	18750	50	N.D.	N.D.
Boron(B)	mg/kg	15000	50	N.D.	N.D.
Cadmium(Cd)	mg/kg	17	0.3	N.D.	N.D.
Chromium (III) (Cr(III))	mg/kg	460	0.2	N.D.	N.D.
Chromium (VI) (Cr(VI))	mg/kg	0.053	0.005	N.D.	N.D.
Cobalt(Co)	mg/kg	130	2.5	N.D.	N.D.
Copper(Cu)	mg/kg	7700	50	N.D.	N.D.
Lead(Pb)	mg/kg	23	0.25	N.D.	N.D.
Manganese(Mn)	mg/kg	15000	50	N.D.	N.D.
Mercury(Hg)	mg/kg	94	1.0	N.D.	N.D.
Nickel(Ni)	mg/kg	930	10	N.D.	N.D.
Selenium(Se)	mg/kg	460	5	N.D.	N.D.
Strontium(Sr)	mg/kg	56000	50	N.D.	N.D.
Tin(Sn)	mg/kg	180000	50	N.D.	N.D.
Zinc(Zn)	mg/kg	46000	50	N.D.	N.D.
Со	Conclusion				



Test Item(s)	Unit	Limit	MDL	Test Res	ult(s)
Test tieth(s)	Unit	Liiiit	IVIDL	1-3	1-4
Aluminium(Al)	mg/kg	28130	50	N.D.	N.D.
Antimony(Sb)	mg/kg	560	2.0	N.D.	N.D.
Arsenic(As)	mg/kg	47	0.5	N.D.	N.D.
Barium(Ba)	mg/kg	18750	50	N.D.	N.D.
Boron(B)	mg/kg	15000	50	N.D.	N.D.
Cadmium(Cd)	mg/kg	17	0.3	N.D.	N.D.
Chromium (III) (Cr(III))	mg/kg	460	0.2	N.D.	N.D.
Chromium (VI) (Cr(VI))	mg/kg	0.053	0.005	N.D.	N.D.
Cobalt(Co)	mg/kg	130	2.5	N.D.	N.D.
Copper(Cu)	mg/kg	7700	50	N.D.	N.D.
Lead(Pb)	mg/kg	23	0.25	N.D.	N.D.
Manganese(Mn)	mg/kg	15000	50	N.D.	N.D.
Mercury(Hg)	mg/kg	94	1.0	N.D.	N.D.
Nickel(Ni)	mg/kg	930	10	N.D.	N.D.
Selenium(Se)	mg/kg	460	5	N.D.	N.D.
Strontium(Sr)	mg/kg	56000	50	N.D.	N.D.
Tin(Sn)	mg/kg	180000	50	N.D.	N.D.
Zinc(Zn)	mg/kg	46000	50	N.D.	N.D.
Co	nclusion			Conformity	Conformity

Remark:

1. As specified by client, the submitted samples were dried to test, the test points: 1-4

2. Raw materials were sampled at the following test points: 1-4

Remark: The samples of the following test points were resubmitted on June 04, 2024:1-4

Migration of Certain Elements: Permissible Limit for Different Materials (	Unit: ma/ka)
Wigration of Certain Elements. I emissible Emit for Different Waterials (	Umt. mg/kg)

Item	Category III In scraped-off toy material	Category II In liquid or sticky toy material	Category I In dry, brittle, powder-like or pliable toy material
Aluminium (Al)	28130	560	2250
Antimony (Sb)	560	11.3	45
Arsenic (As)	47	0.9	3.8
Barium (Ba)	18750	375	1500
Boron (B)	15000	300	1200
Cadmium (Cd)	17	0.3	1.3
Chromium III(Cr(III))	460	9.4	37.5
Chromium VI (Cr(VI))	0.053	0.005	0.02
Cobalt (Co)	130	2.6	10.5
Copper (Cu)	7700	156	622.5



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Lead (Pb)	23	0.5	2.0
Manganese (Mn)	15000	300	1200
Mercury (Hg)	94	1.9	7.5
Nickel (Ni)	930	18.8	75
Selenium (Se)	460	9.4	37.5
Strontium (Sr)	56000	1125	4500
Tin (Sn)	180000	3750	15000
Zinc (Zn)	46000	938	3750

Note:

1. "-" = If less than 0,010 g of toy material can be obtained, it is not required to analyse.

2. "\*" = For accessible glass, metal and ceramic toys or toy parts, if they are not small parts, the soluble test is not required.

## **European Standard on Safety of Toys**

## - EN 71-3:2019+A1:2021: Migration of Certain Elements (Organic Tin)

Test Methods and Equipment: EN 71-3:2019+A1:2021; GC-MS

Test Item(s)	Unit Limit		Limit MDL		Test Result(s)		
Test ttem(s)	Unit	LIIIII	MIDL	1-1	1-2		
Organic Tin	mg/kg	12	0.15	N.D.	N.D.		
Conclusion				Conformity	Conformity		

Test Item(s)	Unit Limit	Limit	MDI	Test Result(s)		
Test Itelli(s)	Unit	Liiiit	MDL	1-3	1-4	
Organic Tin	mg/kg	12	0.15	N.D.	N.D.	
Co	nclusion			Conformity	Conformity	

Remark:

1. As specified by client, the submitted samples were dried to test, the test points: 1-4

2. Raw materials were sampled at the following test points: 1-4

Remark: The samples of the following test points were resubmitted on June 04, 2024:1-4

Migration of Cartain Elements:	Permissible Limit for Different Materials (	(Init: ma/ka)
wingration of Certain Elements.	remissible Limit for Different Materials (	JIIII. IIIg/Kg)

Item	Category III	Category II	Category I
	In scraped-off toy	In liquid or sticky toy	In dry, brittle, powder-like or
	material	material	pliable toy material
Organic Tin	12	0.2	0.9

Note:

1. "-" = If less than 0,010 g of toy material can be obtained, it is not required to analyse.

2. "\*" = For accessible glass, metal and ceramic toys or toy parts, if they are not small parts, the soluble test is not required.

3. Migration of organic tin is expressed as tributyl tin cation content in mg/kg.



## Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 23

-Cadmium(Cd) Content

Test Methods and Equipment: IEC 62321-5:2013; ICP-OES

Test Item(s)	Unit Limit	MDL	Test Result(s)	
Test Item(s)		LIIIII	IVIDL	1-4
Cadmium(Cd)	mg/kg	100	10	N.D.
Со	Conformity			

Remark:

1. As specified by client, the submitted samples were dried to test, the test points: 1-4

2. Raw materials were sampled at the following test points: 1-4

Remark: The samples of the following test points were resubmitted on June 04, 2024:1-4

## Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 51&52

#### - Phthalates Content

Test Methods and Equipment: IEC 62321-8:2017; GC-MS

Test Item(s)	Unit	Limit	MDL	Test Result(s) 1-4
Diisobutyl phthalate (DIBP) CAS:84-69-5	%	0.1	0.005	N.D.
Dibutyl phthalate (DBP) CAS:84-74-2	%	0.1	0.005	N.D.
Butylbenzyl phthalate (BBP) CAS:85-68-7	%	0.1	0.005	N.D.
Di-(2-ethylhexyl) Phthalate (DEHP) CAS:117-81-7	%	0.1	0.005	0.023
Di-n-octyl phthalate (DNOP) CAS:117-84-0	%	/	0.005	N.D.
Di-isononyl phthalate (DINP) CAS:28553-12-0, 68515-48-0	%	/	0.005	N.D.
Di-isodecyl phthalate(DIDP) CAS:26761-40-0, 68515-49-1	%	/	0.005	N.D.
Sum of DIBP +DBP+BBP+DEHP	%	0.1	/	0.023
Sum of DNOP+DINP+DIDP	%	0.1	/	N.D.
Co	nclusion			Conformity

Remark:

1. As specified by client, the submitted samples were dried to test, the test points: 1-4

2. Raw materials were sampled at the following test points: 1-4

Remark: The samples of the following test points were resubmitted on June 04, 2024:1-4



Limit requirements of Phthalates

Toys and childcare articles	Each of DEHP, DBP, BBP, DIBP is less than 0.1% or the sum of DEHP+DBP+BBP+DIBP is less than 0.1%
Toys and childcare articles which can be placed in the mouth by children	The sum of DINP+DIDP+DNOP is less than 0.1%

## 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) 1-4
Benzo[a]pyrene(BaP)	mg/kg	0.5	0.1	N.D.
Benzo[e]pyrene(BeP)	mg/kg	0.5	0.1	N.D.
Benzo[a]anthracene(BaA)	mg/kg	0.5	0.1	N.D.
Benzo[b]fluoranthene(BbF)	mg/kg	0.5	0.1	N.D.
Benzo[j]fluoranthene(BjFA)	mg/kg	0.5	0.1	N.D.
Benzo[k]fluoranthene(BkF)	mg/kg	0.5	0.1	N.D.
Chrysene(CHR)	mg/kg	0.5	0.1	N.D.
Dibenzo[a,h]anthracene(DBA)	mg/kg	0.5	0.1	N.D.
Co	onclusion			Conformity

Remark:

1. As specified by client, the submitted samples were dried to test, the test points: 1-4

2. Raw materials were sampled at the following test points: 1-4

Remark: The samples of the following test points were resubmitted on June 04, 2024:1-4

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	$\leq 0.5$
Benzo[e]pyrene(BeP)	192-97-2	/	≤ 1	$\leq 0.5$
Benzo[a]anthracene(BaA)	56-55-3	/	≤ 1	$\leq 0.5$
Benzo[b]fluoranthene(BbF)	205-99-2	/	≤ 1	$\leq 0.5$
Benzo[j]fluoranthene(BjFA)	205-82-3	/	$\leq 1$	$\leq$ 0.5



Report No.: AGC05443240419-001

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[k]fluoranthene(BkF)	207-08-9	/	<i>≤</i> 1	$\leq 0.5$
Chrysene(CHR)	218-01-9	/	$\leq 1$	$\leq 0.5$
Dibenzo[a,h]anthracene(DBA)	53-70-3	/	$\leq 1$	$\leq 0.5$
Sum of BaP+ BeP+ BaA+ BbF+ BjFA+ BkF+ CHR+ DBA	/	≤ 10	/	/

## Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 5

## - Benzene Content

Test Methods and Equipment: EPA 3550C:2007 & EPA 8260D:2018; GC-FID

Test Item(s)	Unit	Limit	MDL	Test Result(s)
Test Item(s)	Unit	Liiiit	WIDL	1-4
Benzene	mg/kg	5	5	N.D.
Со	Conformity			

Remark:

1. As specified by client, the submitted samples were dried to test, the test points: 1-4

2. Raw materials were sampled at the following test points: 1-4

Remark: The samples of the following test points were resubmitted on June 04, 2024:1-4

## 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) 1-1+1-2
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.



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Test Item(s)	Unit	Limit	MDL	Test Result(s)
o-Aminoazotoluene				1-1+1-2
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.
	onclusion			Conformity

## Remark:

1. As specified by client, the submitted samples were mixed to test, the test points: 1-1+1-2

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



## Regulation (EU) 2019/1021 on persistent organic pollutants (POPs)

### - Pentachlorophenol (PCP) Content

Test Methods and Equipment: EPA 3550C:2007 & EPA 8270E:2018; GC-MS

Test Item(s)	Unit	Limit	MDL	Test Result(s)
Test Item(s)	Unit	LIIIII	WIDL	1-3
Pentachlorophenol (PCP)	mg/kg	5	5	N.D.
Со	Conformity			

## - Formaldehyde Release

Test Methods and Equipment: EN 717-3:1996; UV-Vis

Test Item(s)	Unit	Client's	MDL	Test Result(s)
Test Itelii(s)	Om	limit	WIDL	1-3
Formaldehyde Release	mg/kg	80	1	N.D.
Со	Conformity			

#### - 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:** 21.5 °C, 60 %R.H., 4 hrs **The percentage of soak of wet rubbing cloth:** 95%~100%

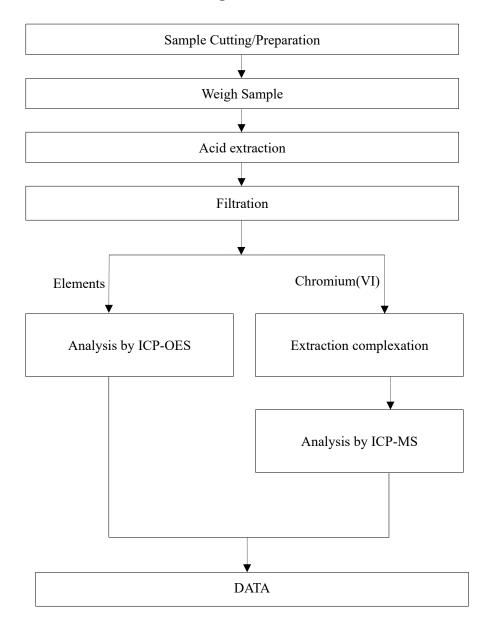
## The long direction of the specimen: Endwise/ Crossrange

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

#### Note:

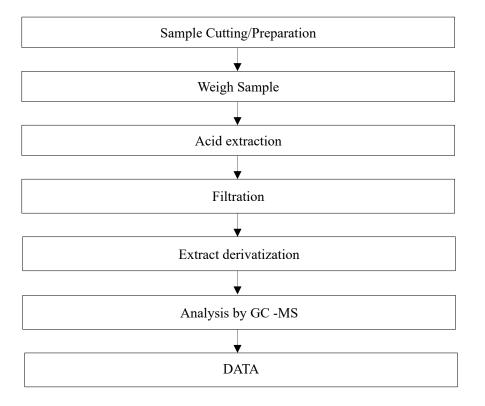
Colour Fastness Grade: Grade 5 = No Colour Change (Best Grade) Grade 1 = Colour Change Seriously (Bad Grade) 9 grades in gray sample card: 5, 4-5, 4, 3-4, 3, 2-3, 2, 1-2, 1.





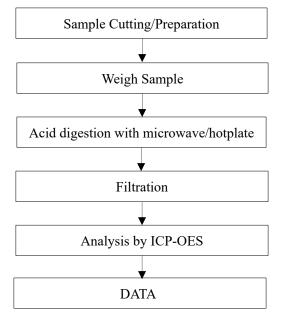
## **Test Flow Chart of Migration of Certain Elements**



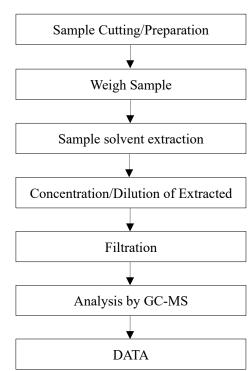


## Test Flow Chart of Migration of Certain Elements (Organic Tin)

## **Test Flow Chart of Heavy Metal Content**

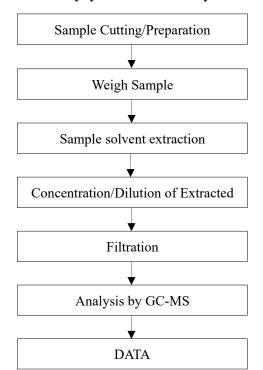






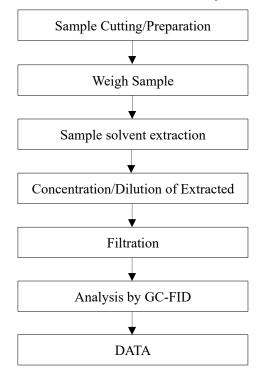
## **Test Flow Chart of Phthalates**





## Test Flow Chart of Polycyclic-aromatic Hydrocarbons (PAHs)

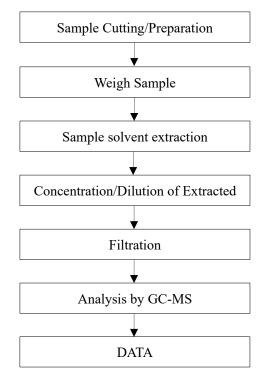




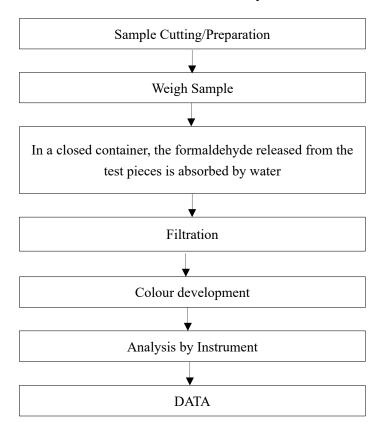
## **Test Flow Chart of Monoaromatic Hydrocarbons**



# **Test Flow Chart of AZO**



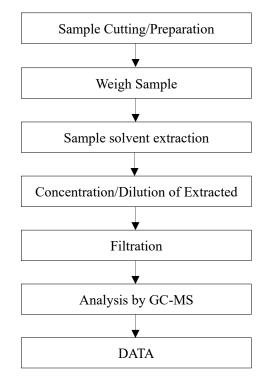




## Test Flow Chart of Formaldehyde Release



## Test Flow Chart of Pentachlorophenol (PCP)





# 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 \*\*\*