79, Magokjungang 8-ro 3-gil, Gangseo-gu, Seoul, Korea, 07791

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INSPECTION REPORT

Report No.

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1. Client

Name of Applicant	JWORLD INDUSTRY CO., LTD.	Business Registration Number	126-86-29870		
Name(Representative)	Han Jung-Hee	Telephone	070-5209-6012		
Address	59 Cheongwonsandan 1-gil, Mado-myeon, Hwaseong-si, Gyeonggido				

- 2. Use of Report: Report of Safety Confirmation for Children's Product
- 3. Inspection Sample

Name of	Itam Na	Classification Model of	Name of	Country of		
Children's Product	Item No.	Safety Standards	Manufacture Company	Origin		
		Non-operated Toy,				
Toys	ALZiP	Toys for Children	JWORLD INDUSTRY	Republic of		
10,0	BABYROOM	(Under 3 years), CO., LTD.		Korea		
		Other Toys, Plastic				

- 4. Date of Inspection: 2019. 10. 02 ~ 2019. 10. 18
- 5. Inspection Method Used:

Safety Confirmation Standards Annex 6

[Ministry of Trade, Industry & Energy Notification No. 2017-0016(2017.01.31.)]

Common Safety Standards for Children's Product

[Ministry of Trade, Industry & Energy Notification No. 2017-0018(2017.01.31.)]

6. Inspection Conclusion: Pass

•		
Affirmation	Prepared by Name : Kim Hee-Ah	Technical Manager
Allimation	Name : Kim Hee-Ah	Name : Lee, Jung-Sang

The above inspection report is the accredited inspection result by Korea Laboratory Accreditation Scheme(KOLAS)

2019, 10, 18

FITI Testing & Research Institute

President Jun Je-Goo

Jun Je 400

Accredited by KOLAS, Republic of KOREA

※ Report Verification No : 7PDM-E4Q4-QFBD ※

(You can see the authenticity of your test report through the above "Report Verification No." at FITI homepage.)

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- Sample Description -

No.	Description	No.	Description
1	Product	4	Polymeric substrates-Plastic(Gray)
2	Polymeric substrates-Plastic(White)	5	Polymeric substrates-Plastic(Handle)
3	Polymeric substrates-Plastic(Pink)	6	Polymeric substrates-Rubber(White)

<Continued>

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■ Part 2 Mechanical and physical properties(#1)

Test Category		Requirement	Results	Conclusion
4.1 Normal use		Toys shall not pose any hazard even if abraded and degraded during normal use.	Not pose any hazard even if abraded and degraded during normal use	Pass
		Toys labeled as washable shall be subjected to washing in accordance with washable toys. After testing, the toy shall continue to conform to the relevant requirements.	N/A	N/A
	Drop test	After testing, the toy shall continue to conform to the relevant requirements.	Compliant with the relevant requirements	Pass
	Tip-over test for large and bulky toys	After testing, the toy shall continue to conform to the relevant requirements.	N/A	N/A
	Dynamic strength test for wheeled ride-on toys other than toy scooters	After testing, the toy shall continue to conform to the relevant requirements.	N/A	N/A
	Torque test	After testing, the toy shall continue to conform to the relevant requirements.	Compliant with the relevant requirements	Pass
4.2	Tension test	After testing, the toy shall continue to conform to the relevant requirements.	Compliant with the relevant requirements	Pass
Reasonably foreseeable abuse	Compression test	After testing, the toy shall continue to conform to the relevant requirements.	Compliant with the relevant requirements	Pass
	Flexure test	After testing, the toy shall continue to conform to the relevant requirements.	N/A	N/A
	Impact test	After testing, the toy shall continue to conform to the relevant requirements.	Compliant with the relevant requirements	Pass
	Soaking test	After testing, the toy shall continue to conform to the relevant requirements.	Compliant with the relevant requirements	Pass
	Impact strength	After testing, the toy shall continue to conform to the relevant requirements.	N/A	N/A
	Ascending frame and similar toy's opening	After testing, the toy shall continue to conform to the relevant requirements.	N/A	N/A
4.3 Appearance		4.3.1 Shape should be good and balanced without deformation like distortion, torsion.	Shape was good and balanced without deformation like distortion, torsion.	Pass

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Test	t Categor	у	Requirement	Results	Conclusion
			4.3.2 Color should be clear and uniform. Also, no stain and discoloration are allowed.	Color was clear and uniform. No stain and discoloration.	Pass
			4.3.3 No obtrusive defects, fragments and scratch are allowed.	No obtrusive defects, fragments and scratch	Pass
			4.3.4 No peeling, recoating and impurities are allowed in painting.	N/A	N/A
			4.3.5 Print and Indication should be clear.	N/A	N/A
			4.3.6 Finishing should be good without stain, roughness, dust, etc.	Finishing was good without stain, roughness, dust, etc.	Pass
			4.3.7 A toy made of original pile shall maintain the processing conditions of pile (implanted, transferred, and removed pile).	N/A	N/A
4.3 /	4.3 Appearance		4.3.8 No bursting, cracking and releasing phthalates, colourants are allowed.	No bursting, Cracking and releasing phthalates, colourants	Pass
			4.3.9 Surfaces (including affixed portion) made of steel materials (other than stainless steel) shall undergo corrosion-resistant treatment including coating, printing, and plating.	N/A	N/A
			4.3.10 Stuffed toys (including dolls) shall be free from bursting or missed stitching, and they shall have good sewing. The colors of sewing thread shall be identical with those of products (except those of different colors particularly used for design).	N/A	N/A
			4.3.11 No concerns about effecting to emotion negatively are allowed.	No concerns about effecting to emotion negatively.	Pass
4.3 4.3.12 Mate		4.3.12.1 Material quality	All materials shall be visually clean and not have any decayed part by harmful insects.	All materials were visually clean, and didn't have decayed part by harmful insects	Pass
Appearance	Material	4.3.12.2 Expandi ng materials	Toys and removable components of toys, which fit entirely in the small-parts cylinder when tested in accordance with small parts test, shall not expand by more than 50 % in any dimension when tested in accordance with expanding materials.	N/A	N/A

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est	Category	Requirement	Results	Conclusion
4.4 Small parts	4.4.1 For children under 36 months	Toys intended for children under 36 months, removable components thereof and components liberated during testing in accordance with reasonably foreseeable abuse tests, shall not fit entirely, whatever their orientation, into the small parts cylinder when tested in accordance with small parts test.	Not fit entirely in the small parts cylinder	Pass
	4.4.2 For children 36 months and over but under 72 months	Toys and toys containing removable components, intended for children 36 months and over but under 72 months, which fit entirely in the small parts cylinder when tested in accordance with small parts test, shall carry a warning.	N/A	N/A
	4.5.1	Toys and components of toys shall be designed so that no part of the toy protrudes past the base of test template A.	N/A	N/A
4.5 Shape, size and strength of certain toys	Squeeze toys, rattles and other toys	The toys and components of toys shall, if they have nearly spherical, hemispherical, or circular flared ends, be designed so that such ends do not protrude past the base of the supplemental test template B.	N/A	N/A
	4.5.2 Small balls	Toys intended for children under 36 months shall not be small balls or contain removable small balls. Toys intended for children 36 months and over, but under 96 months, shall carry a warning.	N/A	N/A
	4.5.3 Pompoms	Pompoms intended for children under 36 months, which become detached when tested in accordance with tension test for pompoms shall not Pass entirely through the test template when tested in accordance with test for pompoms.	N/A	N/A
	4.5.4 Pre-school play figures	Pre-school play figures intended for children under 36 months having a) a round, spherical or hemispherical end with tapered neck attached to a simple cylindrical shape without appendages, and b) an overall length not exceeding 64 mm shall be designed so that the rounded end shall not be capable of entering and penetrating past the full depth of the cavity of the test template when tested in accordance with test for pre-school play figures.	N/A	N/A
	4.5.5 Toy pacifiers	Toy pacifiers attached to or sold with toys intended for children under 36 months shall have a nipple length no longer than 16 mm.	N/A	N/A
	4.5.6 Rubber balloons	Balloons made of rubber latex shall carry a warning.	N/A	N/A
	4.5.7 Marbles	Toys contained removable marbles or marbles liberated after testing according to reasonably foreseeable abuse tests, or their packaging, shall carry a warning.	N/A	N/A

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Test Cate	gory	Requirement	Results	Conclusion
4.5 Shape, size	Hemispheric- aped toys	Cup-shaped, bowl-shaped or one-half-of-an-egg-shaped toys shall, as a minimum, comply with at least one of the requirements in a), b), c) or d). a) The object shall have at least two openings which are at least 13 mm from the rim as measured along the outside contour: - if the openings are placed in the base of the object, at least two of the openings shall be at least 13 mm apart. - if the openings are not placed in the base of the object, at least two of the openings shall be placed at least 30° but not more than 150° apart. b) The plane of the opening to the cup shape shall be interrupted at the centre by some type of divider which extends to 6 mm or less from the plane of the opening. c) The object shall have three openings located between 6 mm and 13 mm from the rim and at least 100° degrees apart as measured along the outside contour. d) The object shall have a repeated scalloped-edge pattern around the entire rim. The maximum distance between centrelines of adjacent peaks shall be 25 mm and the minimum depth shall be 6 mm.	N/A	N/A
4.6 Edges	Accessible rp edges of ss or metal	Toys intended for children under 96 months shall not be hazardous sharp edges when tested in accordance with sharp-edge test. Potentially sharp edges shall be considered non-accessible if they lie adjacent to a surface of the test sample, and any gap between the edge and the adjacent surface does not exceed 0.5 mm Edges of pieces intended to serve as electrical conductors and microscope slides and cover slips are considered as functional edges and do not require a warning. Toys intended for children under 36 months shall not have hazardous functional sharp edges. Toys intended for children 36 months and over but under 96 months, which by reason of their function	N/A	N/A

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Test	Category	Requirement	Results	Conclusion
4.6 Edges	4.6.3 Edges on metal toys	Accessible metal edges, including those of holes and slots, on toys intended for children under 96 months shall be free of hazardous burrs and feathering or shall be hemmed, rolled or curled or shall incorporate a permanently affixed protective equipment or finish.	N/A	N/A
	4.6.4 Edges on moulded toys	Accessible ends of threaded bolts or threaded rods shall be free of sharp edges and burrs, or the ends shall be covered by smooth protective caps so that sharp edges and burrs are not accessible. Any protective caps used shall be subjected to the compression test. Protective caps shall also be subjected to torque test and tension test.	No sharp edges were found	N/A Pass N/A N/A N/A
	4.6.5 Edges on exposed bolts or threaded rods 4.6.3 Edges on metal toys	Accessible edges, corners or mould parting areas of moulded toys intended for children under 96 months shall be free of hazardous sharp edges produced by burrs and flash or so protected that hazardous sharp edges are not accessible.	N/A	N/A
4.7 Sharp points	4.7.1 Accessible sharp points	Accessible points on toys intended for children under 96 months, shall not be hazardous sharp points when tested according to sharp-point test. Potentially sharp points shall be considered non-accessible if they lie adjacent to a surface of the test sample and any gap between the point and the adjacent surface does not exceed 0.5 mm	No sharp points were found	Pass
	4.7.2 Functional sharp points	Toys intended for children under 36 months shall not have hazardous functional sharp points. Toys intended for children 36 months and over but under 96 months, which by reason of their function necessarily include a sharp points, shall carry a warning on the packaging.	N/A	N/A
	4.7.3 Wooden toys	The accessible surfaces and edges of wood used in toys shall be free of splinters.	N/A	N/A
4.8 Projections	4.8.1 Projections	If a projection presents a skin puncture hazard, the projection shall be protected by suitable means, such as turning back the end of a wire or by affixing a smoothly finished protective cap or cover, which effectively increases the surface area for potential contact with the skin.	N/A	N/A
		The protective cap or cover shall not become detached when tested in accordance with tension test for protective components.	N/A	N/A

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Test Category		Requirement	Results	Conclusion
		Handlebar shall be equipped with handle-grips with enlarged ends.	N/A	N/A
4.8 Projections	4.8.2 Handlebar and other tubes	Ends of other tubes shall be equipped with end plugs or other means of protection at the end of the tube.	N/A	N/A
	<u> </u>	Handle grips and other protective devices shall not become detached when subjected to a removal force of 70 N.	N/A	N/A
		Wires and other metallic components that are intended to attach firmly and keep the shape of toy, which are bent over 60° by the force when tested in accordance with flexure test, shall not break and produce hazardous sharp points, sharp edges or projection.	N/A	N/A
4.9 Metal	l wires and rods	The ends of spokes on toy umbrellas shall be protected. If the protection is removed when tested according to tension test for protective components, the ends of the spokes shall be free from sharp edges and sharp points when tested in accordance with sharp-edge test and sharp-point test. Furthermore, if the protective components are removed by the tension test, the spokes shall have a minimum diameter of 2 mm and the ends shall be smooth, rounded and approximately spherical with no burrs.	N/A	N/A
	lm or plastic bags in ing and in toys	Plastic film or plastic bags have an average thickness of ≥ 0.038 mm and individual thickness of ≥ 0.032 mm when tested in accordance with determination of thickness of plastic film and sheeting.	N/A	N/A
puonagi	ing and in toys	Or they have perforations with well-defined holes of 1 % minimum area on any maximum area of dimensions 30 mm × 30 mm.	N/A	N/A
		The free length of cords or elastics which can tangle to form a loop or a fixed noose, included with or attached to toys, shall be less than 220 mm in length when measured under a tension of 25 N ± 2 N.	N/A	N/A
4.11 Cords and elastics	4.11.1 Cords and elastics in toys intended for children under 18 months	If cords or elastics or multiple cords or multiple elastics can tangle and/or form a noose or a fixed loop in connection with any part of the toy, including beads or other attachments on the ends of cord or elastics, the perimeter of the noose or the fixed loop shall be less than 360 mm when measured under a tension of 25 N \pm 2 N.	N/A	N/A
		Cords and elastics on toys shall have a mean thickness (smallest dimension) of 1.5 mm or more.	N/A	N/A
	4.11.2 Self- retracting pull cords in toys intended for children under 18 months	Accessible cords used in cord-activated mechanisms shall not retract more than 6.4 mm when tested according to self-retracting pull cords.	N/A	N/A

N/A = Not applicable <Continued>

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Test	Catego	у	Requirement	Results	Conclusion
	4.11.3 Cords for pull toys intended for children under 36 months		Cords and elastics for pull toys intended for children under 36 months, with a length of more than 220 mm when measured under a tension of 25 N \pm 2 N, shall not be provided with beads or other attachments which could tangle to form a noose or a fixed loop.	N/A	N/A
		rds on toy	Toy bags made of impermeable material with an opening perimeter greater than 360 mm shall not have a drawstring or a cord as a means of closing.	N/A	N/A
4.11 Cords	playpen	Crib or toys and piles	Mobiles intended to be attached to a crib or playpen shall be accompanied by instructions which draw attention to the hazard of not removing the mobile when a baby begins to push up on hands and knees. (Instructions shall also include directions for correct assembly.)	N/A	N/A
	4.11.6 Crib gyms and similar toys		Crib gyms, including crib exercisers, and similar toys intended to be strung across a crib playpen or perambulator shall be accompanied by instructions which draw attention to the hazard of not removing the gym when a baby begins to push up on hands and knees. (Instructions shall also include directions for correct assembly.)	N/A	N/A
	4.11.7 Cords, strings and lines for flying toys		Hand-held cords, strings and lines over 1.8 m long, shall have an electrical resistance of more than 10^8 Ω /cm when tested in accordance with electric resistance of cords.	N/A	N/A
	ior riying toyo		Toy kites and other flying toys shall carry a warning.	N/A	N/A
		Toys with a handle or other structural member	Toys shall have at least one main locking device and at least one secondary locking device, both of which act directly on the folding mechanism. And at least one of the locking devices shall automatically engage when the toy is erected.	N/A	N/A
	4.12.1 Toy	which can fold down over a child	Toys shall not collapse and neither shall any of the locking devices fail or disengage, when the toy is tested in accordance with toy pushchairs.	N/A	N/A
4.12 Folding mechanism s	pushch airs and similar	Toy pushchai rs that do not present a	Toy pushchairs shall have at least a locking device or a safety stop, which may be manual in operation.	N/A	N/A
	toys had a const	hazard of a handle or other structural member folding down over a child	Toy pushchairs shall not collapse and neither shall the locking device or safety stop fail or disengage, when tested according to toy pushchairs.	N/A	N/A

N/A = Not applicable <Continued>

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Test	Category	Requirement	Results	Conclusion
4.12 Folding	4.12.2 Other toys with folding mechanisms	Toys shall have a safety stop or locking device to prevent unexpected or sudden movement or collapse of the toy. The toy shall not collapse when tested in accordance with other toys with folding mechanisms. If it is possible to insert a 5 mm diameter rod between moving parts, it shall also be possible to	N/A N/A	N/A N/A
mechanism s	4.12.3 Hinge-line clearance	insert a 12 mm diameter rod. Toys having a gap or clearance along the hinge line between a stationary portion and a movable portion which weighs more than 0.25 kg, shall be so constructed that if the accessible gap at the hinge line will admit a 5 mm diameter rod, it shall also admit a 12 mm diameter rod at all positions of the hinge.	N/A	N/A
	4.13.1 Circular holes in rigid materials	For toys intended for children under 60 months, if an accessible circular hole in any rigid material less than 1,58 mm in thickness can admit a 6 mm diameter rod to a depth of 10 mm or greater, it shall also admit a 12 mm diameter rod.	N/A	N/A
	4.13.2 Accessible clearances for movable segments	For toys intended for children under 96 months, if accessible clearances can admit a 5 mm diameter rod, they shall also admit a 12 mm diameter rod.	N/A	N/A
4.13 Holes, clearances	4.13.3 Chains or belts in ride-on toys	Chains or belts shall have a shield. It shall not be possible to remove the shield without the use of a tool.	N/A	N/A
and accessibility of mechanisms	4.13.4 Other driving mechanisms	Clockwork, battery-operated, inertial, or other power- driven mechanisms in toys shall be so enclosed that they do not expose accessible sharp edges or sharp points or otherwise present a hazard of crushing the fingers or other parts of the body.	N/A	N/A
	4.13.5 Winding keys	This requirement applies to toys intended for children under 36 months which use winding keys that rotate as the mechanism unwinds. If the clearance between the flukes of the key and the body of the toy can admit a 5 mm diameter rod, it shall also admit a 12 mm diameter rod at all positions of the key. For keys covered by this requirement, there shall be no opening in the flukes of the key which can admit a 5 mm diameter rod.	N/A	N/A
		Spiral springs shall not be accessible if the gap between two consecutive spirals is greater than 3 mm in any position of use.	N/A	N/A
4.14 Springs		Extension helical springs shall not be accessible if the gap between two consecutive turns is greater than 3 mm when the spring is subjected to a tensile force of 40 N.	N/A	N/A
		Compression helical springs shall not be accessible if the gap between two consecutive turns is greater than 3 mm at rest and the spring, when the toy is used, can be subjected to a compression force of 40 N or more.	N/A	N/A

N/A = Not applicable <Continued>

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Test	Catego	·y	Requirement	Results	Conclusion
		4.15.1.1 Sidewa ys stability , feet availabl e for stabiliza tion	Ride-on toys and stationary toys with seats, where the height of the seat from the ground is 27 cm or more and where the feet and/or legs of the child are unrestricted in their sideways motion and thus are available for stabilization, shall not tip over when tested in accordance with sideways stability test, feet available for stabilization.	N/A	N/A
4.15 Stability and overload requirement	4.15.1 Stability of ride- on toys and seats	4.15.1.2 Sidewa ys stability , feet unavail able for stabiliza tion	Ride-on toys and stationary toys with seats, where the feet and/or legs of the child are restricted in their sideways motion, such as by the enclosed sides of a toy automobile, shall not tip over when tested in accordance with sideways stability test, feet unavailable for stabilization.	N/A	N/A
S		4.15.1.3 Fore and aft stability	Ride-on toys and stationary toys with seats, where the rider cannot easily use his/her legs for stabilization and where the height of the seat from the ground is 27 cm or more, shall not tip forward or backward when tested in accordance with fore and aft stability test.	N/A	N/A
	requirer ride-on	Overload nents for toys and ats	Ride-on toys, stationary toys with seats and toys designed to support all or part of the mass of a child shall not collapse when tested in accordance with overload test for ride-on toys and seats) and dynamic strength test for wheeled ride-on toys.	N/A	N/A
	stationa	tability of ary floor	Stationary floor toys greater than 760 mm in height and weighing more than 4.5 kg shall not tip over when tested in accordance with stability test of stationary floor toys.	N/A	N/A
			Any toy, made of impermeable material and having a door or lid, which encloses a continuous volume greater than 0.03 m ³ and in which all internal dimensions are 150 mm or more, shall provide means for breathing by the incorporation of unobstructed ventilation openings.	N/A	N/A
4.16			These ventilation openings shall consist of a minimum of either two openings, each having a total area of at least 650 mm ²	N/A	N/A
Enclosures 4.16.1	4.16.1 V	entilation	These ventilation openings shall placed at least 150 mm apart or one opening which is the equivalent of the two 650 mm ² openings expanded to include the separation area.	N/A	N/A
			The ventilation opening shall remain unobstructed when the toy is placed on the floor in any position and adjacent to two vertical plane surfaces meeting at a 90° angle, so as to simulate the corner of a room.	N/A	N/A

N/A = Not applicable <Continued>

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Test Category		у	Requirement	Results	Conclusion
		4.16.2.1 Lids, doors	Closures, such as lids, covers and doors or devices similar to enclosures shall not be fitted with automatic locking devices.	N/A	N/A
		and similar devices	Closures shall be of a type which can be opened with a force ≤ 45 N when tested in accordance with closures.	N/A	N/A
			Toy chests and similar toys with vertically opening hinged lids shall be provided with lid-support mechanisms to prevent sudden collapse or dropping of the lid.	N/A	N/A
	4.16.2 Closu res	4.16.2.2 Lid support for toy chests and	The lid-support mechanism shall support the lid so that at no position in the arc of travel of the lid, from within 50 mm of the fully closed position through an arc not to exceed 60° from the fully closed position, shall it drop more than 12 mm under the influence of its own mass, except in the last 50 mm of travel. The lid-support mechanism shall comply with this requirement before and after being subjected to 7 000 opening and closing cycles, as described in durability test for toy chest lids.	N/A	N/A
4.16 Enclosures		similar toys	The lid-support mechanism shall not require adjustment by the consumer to ensure adequate lid support nor shall it require adjustment in order to comply with 4.16.2.2 a) after being cycled in accordance with durability test for toy chest lids.	N/A	N/A
			The lid and lid-support mechanism shall comply with the requirements in folding mechanism.	N/A	N/A
			Toy chests shall be accompanied by instructions for proper assembly and maintenance.	N/A	N/A
			Toys that enclose the head, such as space helmets, and which are made of impermeable material shall provide means for breathing by the incorporation of unobstructed ventilation areas close to the mouth and nose area.	N/A	N/A
		oys that the head	These ventilation areas shall consist of a minimum of either two holes, each hole having a total area of at least 650 mm ² .	N/A	N/A
			These ventilation areas shall placed at least 150 mm apart, or one opening which is equivalent to the two 650 mm² holes expanded to include the separation area.	N/A	N/A
4.17 Simulated protective equipment, such as helmets, hats and goggles			All rigid toys that cover the face, such as simulated goggles and sunglasses, space helmets or face shields, when tested in accordance with impact test for toys that cover the face, shall not produce sharp edges, sharp points or loose parts which could enter the eye.	N/A	N/A
2	J. Ja		Toys that simulate safety protective equipment and sunglasses and their packaging shall carry a warning.	N/A	N/A

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Test	Category	Requirement	Results	Conclusion
		Tips or leading edges on rigid projectiles shall not protrude beyond the depth of the gauge shown in when tested according to tip assessment of rigid projectiles.	N/A	N/A
		The leading edge(s) of a projectile, as well as any corners that are adjacent to the leading edge(s), shall be smooth and free of points, burrs, flash or similar projections.	N/A	N/A
		For rigid projectiles discharged by projectile toys with stored energy, the corners of the projectile that are adjacent to the leading edge(s) shall have rounded edges. For purposes of this requirement a radius of 0,25 mm shall be considered sufficient. This requirement does not apply to projectiles made from paper or paperboard.	N/A	N/A
	4.18.2 Projectile toys	Projectiles with a suction cup as a contact surface shall have a length of 57 mm or more when measured according to length of suction cup projectiles before and after testing according to torque test and tension test for a projectile with a suction cup.	N/A	N/A
4.18 Projectile toys		This requirement does not apply to: - projectiles with a suction cup that does not pass entirely through test template C when tested according to small balls test, or - foam shaft projectiles which are 57 mm or more in the as received state when measured according to length of suction cup projectiles), and where the suction cup has a diameter, measured in the relaxed state, that is less than or equal to the diameter of the foam shaft.	N/A	N/A
		Projectiles shall not, whatever their orientation, fit entirely into the small parts cylinder when tested in accordance with small parts test.	N/A	N/A
		This requirement applies before and after testing in accordance with reasonably foreseeable abuse testing and wall impact test for projectiles.	N/A	N/A
	4.18.3 Projectile toys with stored energy	Projectiles with a kinetic energy greater than 0.08 J when tested according to kinetic energy of projectiles shall: - have a contact surfaces made of a resilient material, and -be accompanied by a warning about aiming at the eyes or face - have a kinetic energy per unit area not greater than 2 500 J/cm² when tested according to determination of kinetic energy per area of contact.	N/A	N/A

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Test	t Category	Requirement	Results	Conclusion
	4.18.3 Projectile toys with stored	Where a protective cap, cover or tip is used it shall either -mot become detached from the projectile when tested in accordance torque test and tension test for protective component. or, -if the projectile cap, cover or tip becomes detached and if any resulting component can still be discharged from the discharge mechanism, the toy shall continue to comply with the requirements of 4.18.3.	N/A	N/A
	energy	When tested in accordance with wall impact test for projectile, projectiles shall not produce a hazardous sharp edge or a hazardous sharp point and shall continue to meet the requirements of 4.18.3.	N/A	N/A
		The launching device shall be devised so that any projectile can't be launched in a good manner.	N/A	N/A
		Projectile toys witjout stored energy that might reasonably be able to be launched at the face, should be accompanied by instructions for use, which draw attention to the hazards of aiming at eyes or face.	N/A	N/A
4.18		Mouth-actuated projectile toys shall not permit the intended projectile to pass through the mouthpiece when tested according to durability of mouthactuated toys.	N/A	N/A
Projectile toys	4.18.4 Projectile toys without stored energy	Projectiles in the form of a dart shall conform to the following requirements. a) When measured in accordance with determination of the kinetic energy per area of contact, the contact area of the dart shall be at least 3 cm² b) The dart shall either -be provided with a protective cap, cover or tip that is integral with the front end of the shaft, or -have a blunted front end to which a protective cap, cover or tip is attached, or -be made of a resilient material, unless it is reliant on magnetic forces. c) After testing in accordance with torque test and tension test for protective components projectiles in the form of a dart with a protective cap, cover or tip shall conform with at least one of the following requirements; -the protective cap, cover ot tip shall not become detached from the projectile, or -if the protective cap, cover or tip becomes detached from the projectile and the projectile is made of a resilient material, it shall continue to have a cintact area of at least 3 cm² when measured in accordance with determination of the kinetic energy per area of contact	N/A	N/A

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Test Category		Requirement	Results	Conclusion
4.18 Projectile toys	4.18.4 Projectile toys without stored energy	Arrow-shaped launch vehicles shall not exceed a maximum kinetic energy per unit contact area of 2 500 J / m² as measured by kinetic energy per contact area. After testing in accordance with the wall impact test of the projectile, arrowhead projectiles shall not produce sharp edges or sharp edges that are hazardous to the projectile and should be suitably adapted to the requirements of the toy being fired without stored energy.	N/A	N/A
4.19 Roto	ers and propellers	These requirements do not apply to: - rotors and propellers that normally rotate in the vertical plane, e.g. a propeller on an aeroplane or certain remote controlled flying toys, or - rotors and propellers on projectiles that have a maximum range of 300 mm or less when measured in accordance with determination of projectile range. Rotors and propellers powered by electrical, spring or inertial energy and that take off into free flight shall be designed to minimize the potential of rotating blades to cause injury. For example, this may be accomplished by one or more of the following: a) the design of the rotor or propeller shall prevent access to the blade ends during operation; b) the blade ends shall be "clutched" or loosely attached to the rotor so that the ends are not directly powered by the rotor drive; c) rotors or propellers shall be designed so that the leading edges are protected with a resilient material.	N/A	N/A
		All air inlets of inflatable aquatic toys shall have non-return valves with stoppers permanently attached to the toy.	N/A	N/A
4 20	Aquatic toys	When the toy is inflated, the stopper shall be capable of being pushed into the toy so that it does not stand more than 5 mm from the surface of the toy.	N/A	N/A
0		Advertising copy or graphics shall not state or imply that a child will be safe with such a toy if left unsupervised.	N/A	N/A
		Aquatic toys shall carry a warning that this is not a life-saving	N/A	N/A
4.21 Braking		device Mechanically or electrically propelled ride-on toys with a free-wheeling facility in accordance with determination of free-wheeling facility - shall have a braking device, - when tested in accordance with brake performance for mechanically or electrically powered ride-on toys other than toy bicycles shall not move more than 5 cm, - for such toys which have a mass of 30 kg or more, it shall be possible to lock the brake(parking brake). Electrically propelled ride-on toys shall be operated by means of a	N/A	N/A
		switch which cuts off the power automatically when it is released, without tilting the toy. Application of the brakes shall cut power automatically to the drive.	N/A	N/A
4.22 Toy	4.22.1 Instructions	Toy bicycles shall be accompanied by assembly and maintenance instructions.	N/A	N/A
bicycles	for use	The potential dangers of riding toy bicycles and precautions to be taken shall be brought to the attention of the parents or carers.	N/A	N/A

N/A = Not applicable <Continued>

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Test	t Category	Requirement	Results	Conclusion
	4.22.2	The seat pillar shall have a permanent mark that indicates the minimum insertion depth of the pillar into the frame.	N/A	N/A
	Determination of maximum saddle height	The minimum insertion mark shall be positioned at a distance equal to or greater than two and a half times the diameter of the pillar measured from the bottom of the full diameter of the pillar, and shall not affect the seat pillar strength.	N/A	N/A
4.21 Toy bicycles		Toy bicycles with a free-wheeling facility in accordance with determination of free-wheeling facility shall be equipped with a braking system which operates on the rear wheel.	N/A	N/A
	4.22.3 Braking requirements	For handbrakes, the brake lever dimension, <i>d</i> , measured at the midpoint of the lever shall not exceed 60 mm. The range of adjustment on an adjustable lever shall permit this dimension to be attained. The lever length, <i>I</i> , shall be ≥ 80 mm. When tested in accordance with brake performance	N/A	N/A N/A
		for toy bicycles, the toy shall not move more than 5 cm.	N/A	
•	eed limitation of driven ride-on toys	Electrically driven ride-on toys shall have a maximum speed of 8 km/h when tested in accordance with determination of speed of electrically driven ride-on toys.	N/A	N/A
		When tested in accordance with determination of temperature rises, toys containing a heat source shall not ignite when used at the maximum input.	N/A	N/A
4.24 Toys	containing a heat source	The rise in temperature of handles, knobs and similar parts which are likely to be touched by hand shall not exceed the following values: • parts made of metal : 25 K • parts made of glass or porcelain : 30 K • parts made of plastics, wood or other materials : 35 K	N/A	N/A
		The rise in temperature of other accessible parts of the toy shall not exceed the following values: • parts made of metal : 45 K • parts made of other materials : 55 K	N/A	N/A
4.25 Li	quid-filled toys	Liquid-filled toys with non-accessible liquid shall be tested according to leakage of liquid-filled toys and there shall be no leakage of the contents which could result in a potential hazard.	N/A	N/A
		Liquid-filled teethers and liquid-filled teething toys shall be marked with a warning not to be placed in a freezer compartment.	N/A	N/A
		Mouth-actuated toys and removable mouthpieces of mouth-actuated toys shall not fit entirely in the small parts cylinder when tested in accordance with small parts test.	N/A	N/A
4.26 Mou	ith-actuated toys	Non-detachable mouthpieces of mouth-actuated toys, if detached when tested in accordance with torque test and tension test-general procedure, shall not fit entirely in the small parts cylinder when tested in accordance with small parts test.	N/A	N/A

N/A = Not applicable <Continued>

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Test Category	Requirement	Results	Conclusion
4.26 Mouth-actuated toys	Mouth-actuated toys which contain loose components such as spheres in a whistle or reeds in a noisemaker shall not, when tested in accordance with durability of mouth-actuated toys, release any objects that fit entirely in the small parts cylinder when tested in accordance with small parts test.	N/A	N/A
	Removable or non-detachable mouthpieces fitted to balloons shall conform to the requirements in 4.25 a) and b).	N/A	N/A
4.27 Toy roller skates, toy inline skates and toy skateboards	Toy roller skates, toy inline skates and toy skateboards shall carry a warning advising that protective equipment be worn.	N/A	N/A
4.28 percussion caps	Assuming reasonably foreseeable use, percussion caps specifically designed for use in toys shall not produce flames, glowing parts or other debris which are potential eye injury hazards.	N/A	N/A
	The packaging of percussion caps shall carry a warning.	N/A	N/A
4.29 glass and porcelain	The toys intended for children under 36 months shall not have the accessible glass and porcelain. Toys intended for children 36 months and over, which by reason of the following can include the accessible glass and porcelain. - functional reason, glass fiber for reinforcement, glass marbles or glass eyes for dolls	N/A	N/A
	Loose suction cups, removable suction cups and suction cups attached to toys with cord or elastics shall be designed so that no part of the toy protrudes past the base of test template C when tested in accordance with small balls and suction cup test.	N/A	N/A
4.30 Suction cups	Suction cups detached from toy after testing according to reasonably foreseeable abuse tests, shall not protrudes past the base of test template C when tested in accordance with small balls and suction cup test and shall continue to conform to the relevant requirements.	N/A	N/A
	The A-weighted equivalent sound pressure level, L _{pAeq} , of continuous sounds produced by close-tothe-ear toys shall not exceed 65 dB.	N/A	N/A
	The A-weighted equivalent sound pressure level, L _{pAeq} , of continuous sounds produced by all other toys except close-to-the-ear toys shall not exceed 85 dB.	N/A	N/A
	The C-weighted peak sound pressure level, L_{pCpeak} , of impulsive sounds produced by close-to-the-ear toys shall not exceed 95 dB.	N/A	N/A
4.31 Acoustic requirements	The C-weighted peak sound pressure level, L _{pCpeak} , of impulsive sounds produced by any type of toy excluding toys using explosive action (e.g. percussion caps) shall not exceed 115 dB.	N/A	N/A
	The C-weighted peak sound pressure level, L _{pCpeak} , of impulsive sounds produced by a toy using percussion caps or other explosive action shall not exceed 125 dB.	N/A	N/A
	If the C-weighted peak sound pressure level, L _{pCpeak} , of impulsive sounds produced by a toy using percussion caps or other explosive action exceeds 115 dB, the potential danger to hearing shall be drawn to the attention of the user.	N/A	N/A

N/A = Not applicable <Continued>

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Test	t Category	Requirement	Results	Conclusion
	4.32.2 Warnings and instructions for use	Toy scooters shall carry a warning and an indication about the intended body mass group. They shall also be accompanied by instructions for use and precautions to be taken.	N/A	N/A
	ioi use	The potential dangers of riding a toy scooter shall be brought to the attention of the parents or carers.	N/A	
	4.32.3 Strength	When tested according to static strength for toy scooters and dynamic strength for toy scooters, toy scooters shall not: - produce accessible hazardous sharp edges - produce accessible hazardous sharp points - make accessible driving mechanisms that present a hazard of crushing the fingers or other parts of the body - collapse so that they do not continue to comply with relevant requirements of this standard.	N/A	N/A
		When tested according to strength of toy scooter steering tubes: - steering tubes shall not collapse so that they do not continue to comply with relevant requirements of this standard - steering tubes shall not separate into two or more parts - locking devices shall not fail or disengage	N/A	N/A
4.32 Toy	4.32.4 Stability	Toy scooters shall not tip over when tested with a load of 50 kg according to sideways stability test, feet available for stabilization.	N/A	N/A
scooters		To prevent sudden changes of height, steering tubes with adjustable height shall: - be adjustable with the use of a tool, or - have at least one main locking device and one secondary locking device, of which at least one shall automatically be engaged when the height is adjusted. The separation of the steering tube shall not be possible unless intended.	N/A	N/A
	4.32.5 Adjustable and folding	Steering tubes intended to be folded shall have a locking device on the folding mechanism.	N/A	N/A
	steering tubes and handlebars	The space between moving elements capable of injuring fingers shall also allow a 12 mm rod to be inserted, if it allows a 5 mm rod to be inserted.	N/A	N/A
		Accessible openings in moving elements capable of shearing a finger shall not allow the insertion of a 5 mm rod.	N/A	N/A N/A N/A N/A
		Handlebars shall not separate into two or more parts when tested according to resistance to separation of handlebar.	N/A	N/A
	4.32.6 Braking	Other toy scooters shall have at least one braking system which shall operate on the rear wheel and which shall effectively and smoothly reduce the speed without coming to an abrupt stop.	N/A	N/A
		When tested according to brake performance for toy scooters, the force required to hold the toy scooter on the inclined plane shall be less than 50 N.	N/A	N/A

N/A = Not applicable <Continued>

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Tes	t Category	Requirement	Results	Conclusion
	4.32.7 Wheel size	The diameter of the front wheel(s) on toy scooters shall be ≥ 120 mm.	N/A	N/A
4.32 Toy scooters	4.32.8 Protruding parts	The handlebars on toy scooters shall be protected by rounded handlebar grips or plugs of resilient material, which have a diameter of 40 mm or more when measured not more than 20 mm from the end of the grip.	N/A	N/A
	4.33.1 General requirements	The requirements in 4.32.3 do not apply to magnetic components in Magnetic/electrical experimental sets if they: - have a magnetic flux index less than 50 kG²mm² (0.5 T²mm²) when tested according to magnetic flux index, or - do not fit entirely in the cylinder when tested according to small parts test	N/A	N/A
4.33		Any loose-as received magnet and magnetic component either shall have a magnetic flux index less than 50 kG ² mm ² (0.5 T ² mm ²) when tested in accordance with magnetic flux index, or shall not fit entirely in the cylinder when tested in accordance with small parts test.	N/A	N/A
Magnets	4.33.2 Toys other than Magnetic/electrical experimental sets	For magnets that are accessible but cannot be grasped, when tested in accordance with reasonably foreseeable abuse tests and tension test of magnets, any magnets and magnetic components that become liberated from a toy either shall have a magnetic flux index less than 50 kG²mm² (0.5 T²mm²) when tested in accordance with magnetic flux index, or shall not fit entirely in the cylinder when tested in accordance with small parts test.	N/A	N/A
	4.33.3 Magnetic/electrical experimental sets	Magnetic/electrical experimental sets intended for children 8 years and over that contain magnetic components shall carry a warning.	N/A	N/A
	experimental sets	As for the toy using windup spring 50 times, any of the switch, windup spring, washer, toothed wheel, and other components shall be kept free from malfunction.	N/A	N/A
4.34 Stren	gth of accessories	Toys using inertia shall be free from malfunction after three subsequent rotations of wheels at max. linear speed and sudden stopping wheels.	N/A	N/A
		Electric-powered toys shall be free from malfunction when continuously operated for 30 minutes or longer.	N/A	N/A
4.35 Du	rability of switch	Toys shall be robust and easy to operate and free from malfunction after 100 subsequent operations at a rate of approx. once per second.	N/A	N/A
4.36 Coated film hardness		The coated film on the metal surface shall not be easily peeled off. When applying 700 g of load on the coated film in the vertical direction with a coated film tester, line of width greater than 0.5 mm shall not be allowed.	N/A	N/A
		When wiping the colored or sketched area with a piece of wet cotton cloth lightly, the paint shall not be peeled off, or the cotton cloth shall not be smudged with paint.	N/A	N/A
4.37 Power cord of lamp wire		Toys of the socket type shall not cause fault on the body or power cord when fixing the body and applying tensile force 3 times the body weight on the power cord for 15 seconds.	N/A	N/A

N/A = Not applicable <Continued>

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Test Category		Requirement	Results	Conclusion
4.38 Strength of cord for remote control		The terminal of the power cord shall be treated to prevent damage to rolling, eyelet, rubber ring, or other device and shall be free from faulty connection after testing in accordance with 5.24.2.	N/A	N/A
4.39 Po	wer toys	Power supply of AC or DC 25 V or higher shall not be touched when operating the product, and each section shall be free from shock.	N/A	N/A
•	ttles, teether and toys for infant)	The part of the toy to be bitten by the mouth of a child shall not be cut or split during the biting test.	N/A	N/A
other similar toys for imanty		Toys affixed to foodstuff even if the foodstuff is not fully swallowed shall not be fully inserted into the cylinder when testing disassembled parts as well as the toy itself in accordance with the requirements for small part test. A toy affixed to foodstuff and a small ball disassembled from the toy shall be compliant with the requirements for small ball and suction cup.	N/A	N/A
4.41 Toys att	ached to food	Toys that is operable in the mouth and a mouthpiece disassembled from the toy shall not be fully inserted into the cylinder when testing in accordance with the requirements for small part after performing reasonably predictable misuse test. Toys affixed to foodstuff and a small ball disassembled from the toy shall be compliant with the requirements for small ball and suction cup.	N/A	N/A
	A.2.1	The battery and battery compartment shall be permanently marked with the correct polarity and voltage of battery. If it is not practical to mark this information on the toy due to its size or shape, such marking shall be indicated in the user's manual.	N/A	N/A
Annex A Battery- operated toys	A.2.2	The rechargeable battery (secondary battery) used on a toy shall not be recharged while installed inside the toy. However, recharging the secondary battery while it is installed inside the toy is allowed under any of the following conditions: a) Toy whose mass is 5 kg or less, with any of the following structures: • Structure that prevents replacing the rechargeable secondary battery without destroying the toy with a primary battery of standard specifications; • Structure of a toy equipped with a rechargeable battery and which prevents installing other toys or individual battery; or • Structure that prevents connection in the wrong polarity when recharging. b) Toy whose mass is greater than 5 kg, with any of the following structures: • Structure wherein the battery is permanently installed in the toy; • Structure with tools for inserting and charging the battery in the correct polarity and which can prevent the connection of the primary battery of standard specifications; or • Structure that prevents the operation of the toy during battery charging.	N/A	N/A

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Test Cat	egory	Requirement	Results	Conclusion
		The rechargeable toy shall be equipped with a		
		function for indicating the charging level such as	N/A	N/A
		LED indicator on the charger or toy.		
		The manufacturer of a toy that uses rechargeable		
	A.2.3	battery shall provide the charger or specifications of	N/A	N/A
	7.1.2.0	the charger.		
		A toy charged by solar cell battery or which self-		N/A N/A N/A N/A
		generates power by rotating the handle is not	N/A	N/A
		covered by the requirements for indicating the	1477	
		charging level.		
		The battery of a toy for a child less than 36 months		
		old shall not be readily accessible unless a tool is	N/A	N/A
		used or force is applied on both ends of the battery	N/A	1.071
	A.2.4	compartment.		
		The battery shall not be readily accessible when		N/A N/A N/A N/A
		performing accessibility test of parts or accessories	N/A	
		and reasonably predictable misuse test.		
	A.2.5	The battery of a toy shall not be readily accessible		
		unless a tool is used or force is applied on both		
		ends of the battery compartment when performing		
A A		small part test.	N/A	N/A
Annex A		The battery shall not be readily accessible when		
Battery-		performing accessibility test of parts or accessories		
operated toys		and reasonably predictable misuse test.		
		Voltage exceeding 24 V shall not be supplied to a toy		
	A.2.6	operated by battery. Voltage on any accessible part	N/A	N/A
		of a toy shall not exceed DC or AC 24 V.		
		Using batteries of different shape or capacity on a		
		single electric circuit is not allowed. In case of a		
		need to use batteries of more than one capacity for		
	A.2.7	different functions or combination of power and	N/A	N/A
		battery, individual circuits shall be electrically		
		isolated from each other to prevent current among		
		circuits.		
		a) The rise in temperature of handles, knobs and		
		similar parts which are likely to be touched by hand		
		shall not exceed the following values:		
		parts made of metal : 25 K	N/A	N/A
		parts made of glass or porcelain : 30 K		
	A.2.8	parts made of plastics, wood or other materials : 35		
		K		
		b) The rise in temperature of other accessible parts		
		of the toy shall not exceed the following values:	N/A	N/A
		• parts made of metal : 45 K		
		parts made of other materials : 55 K		N/A = Not applica

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Test Category		Requirement	Results	Conclusion
	A.2.8	c) Additional requirements Sealant shall not leak. Flame or molten metal substance shall not occur. Toxic or ignitable gas or other harmful substances shall not occur. Steam shall not be condensed inside the toy. The attachment shall not be deformed so severely that the applicable requirements are not satisfied. The battery shall not emit harmful substance, and neither shall it be burnt black.	N/A	N/A
		The electric power experiment set for students 8 years or older is not covered by the requirements in A.2.8. This type of set shall be marked with the following in addition to the marking specified in Part 1, Mark 5 on the packaging: "Warning! For children 8 years or older only."	N/A	N/A
	A.2.9	The insulator between both poles of the circuit without short circuit shall have mechanical strength appropriate for preventing damage to the toy during normal operation and reasonably predictable misuse.	N/A	N/A
Annex A Battery-	A.2.10	An electric circuit shall not come into contact with any part of the battery except the contact point on the terminal.	N/A	N/A
Battery- operated toys	A.2.11	A motor-driven tool shall include guidelines for the safe use of the battery, if applicable. The guidelines shall contain the following information: How to install and remove the battery; A battery that is not rechargeable shall not be recharged; An adult shall be present when charging the rechargeable battery; The charging level indicator on the battery charger shall be used for preventing excessive charging; Using an old battery together with the new battery or batteries of different shapes is not allowed; A fully consumed battery shall be removed from the toy; and The power supply terminal shall be free from short circuit.	N/A	N/A
	A.2.12	Toys containing laser part shall be used by children 8 years or older only. Note: There is a need to check the configuration with the test reports for Portable Laser Items in Annex 46 of the Safety Criteria of Self-Regulated Safety Confirmation.	N/A	N/A

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Test	Category		Requirement	Results	Conclusion	
		A.3.1	After testing, the toy shall continue to conform to the relevant requirements.	N/A	N/A	
			After testing, the toy shall continue to conform to the relevant requirements.	N/A	N/A	
A A	A.3 Safety requirem	A.3.2	After testing, the toy shall continue to conform to the relevant requirements.	N/A	N/A	
Annex A Battery- operated	ents for portable sealed		After testing, the toy shall continue to conform to the relevant requirements.	N/A	N/A	
toys	ry cells and	A.3.4	ry cells and A.3.4 After testing, the toy shall continue to conform to the relevant requirements.		N/A	N/A
	Datteries		After testing the toy shall continue to conform to the		N/A	N/A
		A.3.6	After testing, the toy shall continue to conform to the relevant requirements.	N/A	N/A	

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■ Part 3 Flammability(#1)

Test	Category	Requirement	Results	Conclusion
		Toys shall not contain celluloid(cellulose nitrate) and materials with the same behavior in fire as celluloid, except when used in varnish, paint, glue, or in balls of the type used for table tennis or similar games.	Not contain celluloid(cellulos e nitrate) and materials with the same behavior in fire as celluloid	Pass
4.1 General		Toys shall not contain materials with a piled surface which produce surface flash when a flame is applied to the tested material.	Not contain materials with a piled surface which produce surface flash when a flame is applied to the tested material	Pass
		Toys shall not contain highly flammable solid.	Not contain highly flammable solid	Pass
		Toys shall not contain flammable gases, highly flammable liquids, flammable liquids, and flammable gels.	Not contain flammable gases, highly flammable liquids, flammable liquids, and flammable gels	Pass
	4.2.2 Material made	The duration of flaming shall not be more than 2 s after the removal of the test flame.	N/A	N/A
	from hair, pile, or material that behaves in a similar manner to hair, which protrude 50 mm or more from the surface of the toy	erial that aves in a remaining test sample shall be more than 50 % of the greatest initial length, when the initial length was 150		N/A
		In addition, if ignition occurs, the maximum length of remaining test sample shall be more than 25 % of the greatest initial length, when the initial length was less than 150 mm	N/A	N/A
4.2 Toys to	4.2.3 Material made from hair, pile, or material that behaves in a	2.3 Material made from hair, pile, or material that The duration of flaming shall not be more than 2 s after the removal of the test flame.		N/A
be worn on the head	similar manner to hair, which protrude less than 50 mm from the surface of the toy	The maximum distance between the upper edge of the burnt area and the point of application of the test flame shall not be more than 70 mm	N/A	N/A
	4.2.4 Full or partial	The duration of flaming shall not be more than 2 s after the removal of the test flame.	N/A	N/A
	moulded head masks	The maximum distance between the upper edge of the burnt area and the point of application of the test flame shall not be more than 70 mm	N/A	N/A
	4.2.5 Flowing elements of toys to be worn on the head	The rate of spread of flame of the test sample shall not exceed 10 mm/s or the test sample shall self-extinguish.	N/A	N/A

N/A = Not applicable <Continued>

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Test Category	Requirement	Results	Conclusion
	The rate of spread of flame of the test sample shall not exceed 30 mm/s or the test sample shall self-extinguish.	N/A	N/A
4.3 Toy disguise costumes and toys intended to be worn by a child in play	If the rate of spread of flame is between 10 mm/s and 30 mm/s, the appropriate parts of the toy and the packaging shall be permanently marked with a statement similar to the following: "Warning! Keep away from fire"	N/A	N/A
	The rate of spread of flame of the test sample shall not exceed 30 mm/s or the test sample shall self-extinguish.	N/A	N/A
4.4 Toys intended to be entered by	If the test sample has a rate of spread of flame greater than 20 mm/s, there shall be no flaming debris or molten drips.	N/A	N/A
a child	If the rate of spread of flame is between 10 mm/s and 30 mm/s, the appropriate parts of the toy and the packaging shall be permanently marked with a statement similar to the following: "Warning! Keep away from fire"	N/A	N/A
4.50 6 500 14	The rate of spread of flame on the surface shall not	N/A	N/A
4.5 Soft-filled toys	be more than 30 mm/s	N/A	N/A

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■ Part 4 Harmful Chemical Substance

Tes	et		4.1 Har	mful Substance E	xtraction (CATEG	GORY 3)		
Cate		Antimony (Sb)	Arsenic (As)	Barium (Ba)	Cadmium (Cd)	3 Chromium(*) (Cr Ⅲ)	Lead (Pb)	Conclusion
Require	ement	≤ 560 mg/kg	≤ 47 mg/kg	≤ 18750 mg/kg	≤ 17 mg/kg	≤ 460 mg/kg	≤ 160 mg/kg	-
	#2	< 10 (Not Detected)	< 10 (Not Detected)	< 10 (Not Detected)	< 5 (Not Detected)	< 5 (Not Detected)	< 10 (Not Detected)	Pass
	#3	< 10 (Not Detected)	< 10 (Not Detected)	< 10 (Not Detected)	< 5 (Not Detected)	< 5 (Not Detected)	< 10 (Not Detected)	Pass
Results	< 10		< 10 (Not Detected)	< 10 (Not Detected)	< 5 (Not Detected)	< 5 (Not Detected)	< 10 (Not Detected)	Pass
#5	#5	< 10 (Not Detected)	< 10 (Not Detected)	< 10 (Not Detected)	< 5 (Not Detected)	< 5 (Not Detected)	< 10 (Not Detected)	Pass
	#6	< 10 (Not Detected)	< 10 (Not Detected)	< 10 (Not Detected)	< 5 (Not Detected)	< 5 (Not Detected)	< 10 (Not Detected)	Pass
Te: Cateç		Mercury (Hg)	Selenium (Se)	Boron (B)	Cupper(Cu)	Nickel (Ni)	Zinc (Zn)	Conclusion
Require	ement	≤ 94 mg/kg	≤ 460 mg/kg	≤ 15 000 mg/kg	≤ 7 700 mg/kg	≤ 930 mg/kg	≤ 46 000 mg/kg	-
	#2	< 10 (Not Detected)	< 10 (Not Detected)	Pass				
	#3	< 10 (Not Detected)	< 10 (Not Detected)	Pass				
Results	#4	< 10 (Not Detected)	< 10 (Not Detected)	Pass				
	#5	< 10 (Not Detected)	< 10 (Not Detected)	Pass				
	#6	< 10 (Not Detected)	< 10 (Not Detected)	Pass				

(*) If Safety Standard 3 Chromium (CrⅢ) below accepted criteria:

The results of the Cr (III) test are based on the Safety Confirmation Standard 6 Annex 'Part 4 Hazardous Chemicals' and are based on the total chromium analysis, not the direct analytical values of Cr (III) and Cr (VI) Described in the report as derived value.

-Detection Limit : Antimony (Sb), Arsenic (As), Barium (Ba), Lead (Pb), Mercury (Hg), Selenium (Se), Boron (B), Cupper(Cu), Nickel (Ni), Zinc (Zn) : 10 mg/kg,

Cadmium (Cd), 3 Chromium (Cr Ⅲ): 5 mg/kg

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Test Category	Requirement	Results		Conclusion	Test Category	Requirement		Results	Conclusion
	≤ 300 mg/kg	#2	< 10 (Not Detected)	Pass		≤ 75 mg/kg	#2	< 10 (Not Detected)	Pass
4.2 Lead (Pb) Content	≤ 300 mg/kg	#3	< 10 (Not Detected)	Pass	Pass 4.3 Cadmium (Cd) Content	≤ 75 mg/kg	#3	< 10 (Not Detected)	Pass
	≤ 300 mg/kg	#4	< 10 (Not Detected)	Pass		≤ 75 mg/kg	#4	< 10 (Not Detected)	Pass
	≤ 300 mg/kg	#5	< 10 (Not Detected)	Pass		≤ 75 mg/kg	#5	< 10 (Not Detected)	Pass
	≤ 300 mg/kg	#6	< 10 (Not Detected)	Pass		≤ 75 mg/kg	#6	< 10 (Not Detected)	Pass

Test Category	Requirement	Results	Conclusion	
4.4 Nickel(Ni) Release	≤0.5 µg/m²/week	N/A	N/A	

			4.5 Phthalates Contents									
Test Category		Di-(2- ethylhexyl) phthalate (DEHP)	Dibutyl phthalate (DBP)	Butylbenzyl phthalate (BBP)	Di-n- octhyl phthalate (DnOP)	Di-iso- nonyl phthalate (DINP)	Diisodecyl phthalate (DIDP)	Total (DEHP, DBP, BBP)	Total (DEHP, DBP, BBP, DINP, DIDP, DnOP)	Conclusion		
Require	ment	t ≤ 0.1 %								-		
		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	_		
	#2	(Not Detected)	(Not Detected)	(Not Detected)	(Not Detected)	(Not Detected)	(Not Detected)	(Not Detected)	(Not Detected)	Pass		
D 14 -		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01			
Results	esults #5	(Not Detected)	(Not Detected)	(Not Detected)	(Not Detected)	(Not Detected)	(Not Detected)	(Not Detected)	(Not Detected)	Pass		
	""	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01			
	#6	(Not Detected)	(Not Detected)	(Not Detected)	(Not Detected)	(Not Detected)	(Not Detected)	(Not Detected)	(Not Detected)	Pass		
-Detect	ion Li	mit : 0.01 %										

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■ Part 8 Organic Chemical Compounds

Test Category	Requirement	Results	Conclusion
рН	3.0 ~ 10.0	N/A	N/A

Test Category	Requir	ement	Results	Conclusion
	Textile	≤ 30 mg/kg	N/A	N/A
	Paper	≤ 30 mg/kg	N/A	N/A
Formaldehyde	Resin-bonded Wood	≤ 80 mg/kg	N/A	N/A
	Adhesive		N/A	N/A

Toet	First-action method for colourants and primary aromatic amines (Colour-fastness to Perspiration)										
Test Category	Acid										
Category	Cellulose Acetate	Cotton	Polyamide	Polyester	Acrylic	Wool					
Requirement	3-4 Grade ≥	3-4 Grade ≥	3-4 Grade ≥	3-4 Grade ≥	3-4 Grade ≥	3-4 Grade ≥	-				
Results	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
	First-action method for colourants and primary aromatic amines (Colour-fastness to Perspiration)										
Test Category	Alkali										
Category	Cellulose Acetate	Cotton	Polyamide	Polyester	Acrylic	Wool					
Requirement	3-4 Grade ≥	3-4 Grade ≥	3-4 Grade ≥	3-4 Grade ≥	3-4 Grade ≥	3-4 Grade ≥	-				
Results	N/A	N/A	N/A	N/A	N/A	N/A	N/A				

Test	Flame Retardants							
Category	Tri-o-cresyl phosphate	Tris(2-chloroethyl) phosphate	Tris(2-chloro-1- methylethyl)phosphate	Tris(1,3-dichloro-2- propyl) phosphate	Conclusion			
CAS NO. 78-30-8		115-96-8	13674-84-5	13674-87-8				
Requirement	≤ 50 mg/kg	≤ 50 mg/kg	≤ 5 mg/kg	≤ 5 mg/kg	-			
Results	N/A	N/A	N/A	N/A	N/A			

- Detection Limit: Tri-o-cresyl phosphate, Tris(2-chloroethyl) phosphate = 50 mg/kg,

Tris(2-chloro-1-methylethyl)phosphate, Tris(1,3-dichloro-2-propyl) phosphate = 5 mg/kg

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	Colourants								
Test Category	Disperse Blue 1	Disperse Blue 3	Disperse Blue 106	Disperse Blue 124	Disperse Yellow 3	Disperse Orange 3	Disperse Orange 37/76	Disperse Red 1	Conclusion
CAS NO.	2475-45-8	2475-46-9	12223-01-7	61951-51-7	2832-40-8	730-40-5	12223-33-5 13301-61-6	2872-52-8	
Requirement	≤ 10 mg/kg	≤ 10 mg/kg	≤ 10 mg/kg	≤ 10 mg/kg	≤ 10 mg/kg	≤ 10 mg/kg	≤ 10 mg/kg	≤ 10 mg/kg	-
Results	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Test Category	Solvent Yellow 1	Solvent Yellow 2	Solvent Yellow 3	Basic Red 9	Basic Violet 1	Basic Violet 3	Acid Red 26	Acid Violet 49	Conclusion
CAS NO.	60-09-3	60-11-7	97-56-3	569-61-9	8004-87-3	548-62-9	3761-53-3	1694-09-3	20110101011
Requirement	≤ 10 mg/kg	≤ 10 mg/kg	≤ 10 mg/kg	≤ 10 mg/kg	≤ 10 mg/kg	≤ 10 mg/kg	≤ 10 mg/kg	≤ 10 mg/kg	-
Results	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

	Primary Aromatic Amines									
Test Category	Benzidine	2-Naphthyl amine	4- Chloroaniline	3,3'- Dichloro benzidine	3,3'- Dimethoxybe nzidine	3,3'-Dimethyl benzidine	o-Toluidine	2- Methoxyaniline (o-Anisidine)	Aniline	Conclusion
CAS NO.	92-87-5	91-59-8	106-47-8	91-94-1	119-90-4	119-93-7	95-53-4	90-04-0	62-53-3	
Requirement	≤ 5 mg/kg	≤ 5 mg/kg	≤ 5 mg/kg	≤ 5 mg/kg	≤ 5 mg/kg	≤ 5 mg/kg	≤ 5 mg/kg	≤ 5 mg/kg	≤ 5 mg/kg	-
Results	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
- Detection Lim	- Detection Limit : 5 mg/kg									

Monomers(migration) Test Category							
rest Cate	Test Category Acrylamide		Bisphenol A Formaldehyde Phenol		Phenol	Styrene	Conclusion
CAS N	CAS NO. 79-06-1		80-05-7	50-00-0	108-95-2	100-42-5	
Require	ment	≤ 0.02 mg/L	≤ 0.1 mg/L	≤ 2.5 mg/L	≤ 15 mg/L	≤ 0.75 mg/L	-
Results	#2	< 0.02 (Not Detected)	< 0.1 (Not Detected)	< 2.5 (Not Detected)	< 15 (Not Detected)	< 0.75 (Not Detected)	Pass

- Detection Limit : Acrylamide = 0.02 mg/L, Bisphenol A = 0.1 mg/L, Formaldehyde = 2.5 mg/L, Phenol = 15 mg/L, Styrene = 0.75 mg/L

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				So	lvents(migratio	on)			
Test Catego		Trichloroethylene	Dichloromethane	2- Methoxyethyl acetate	2- Ethoxyethanol	2-Ethoxyethyl acetate	Bis(2- methoxyehtyl) ether	2- Methoxypropyl acetate	Conclusion
CAS N	0.	79-01-6	75-09-2	110-49-6	110-80-5	111-15-9	111-96-6	70657-70-4	
Requiren	nent	≤ 0.02 mg/L	≤ 0.06 mg/L		≤ 0.5 mg/L(total)				
Results	#2	< 0.02 (Not Detected)	< 0.06 (Not Detected)	< 0.1 (Not Detected)	< 0.1 (Not Detected)	< 0.1 (Not Detected)	< 0.1 (Not Detected)	< 0.1 (Not Detected)	Pass
Test Catego		Methanol	Nitrobenzene	Cyclohexanon e	3,5,5- Trimethyl-2- cyclohexene- 1-one	Toluene	Ethylbenzen e	Xylene (all isomers)	Conclusion
CAS N	0.	67-56-1	98-95-3	108-94-1	78-59-1	108-88-3	100-41-4	-	
Requiren	nent	≤ 5 mg/L	≤ 0.02 mg/L	≤ 46 mg/L	≤ 3 mg/L	≤ 2 mg/L	≤1 mg/L	≤ 2 mg/L (total)	-
Results	#2	< 5 (Not Detected)	< 0.02 (Not Detected)	< 46 (Not Detected)	< 3 (Not Detected)	< 2 (Not Detected)	< 1 (Not Detected)	< 2 (Not Detected)	Pass

⁻ Detection Limit: Trichloroethylene = 0.02 mg/L, Dichloromethane = 0.06 mg/L,

^{3,5,5-}Trimethyl-2-cyclohexene-1-one = 3 mg/L, Toluene = 2 mg/L, Ethylbenzene = 1 mg/L, Xylene(total) = 2 mg/L

			Solvents(inhalation)			
Test Category	Toluene	Ethylbenzene	Xylene (all isomers)	1,3,5- Trimethylbenzene (mesitylene)	Trichloroethylene	Conclusion
CAS NO.	108-88-3	100-41-4	-	108-67-8	79-01-6	
Requirement	≤ 260 µg/m³	≤ 5 000 µg/m³	≤ 870 µg/m³(total)	≤ 2 500 µg/m³	≤ 33 µg/m³	-
Results	N/A	N/A	N/A	N/A	N/A	N/A
Test Category	Dichloromethane	n-Hexane	Nitrobenzene	Cyclohexanone	3,5,5-Trimethyl-2- cyclohexene-1- one	Conclusion
CAS NO.	75-09-2	110-54-3	98-95-3	108-94-1	78-59-1	
Requirement	≤ 3 000 µg/m³	≤ 1 800 µg/m³	≤ 33 µg/m³	≤ 136 µg/m³	≤ 200 µg/m³	-
Results	N/A	N/A	N/A	N/A	N/A	N/A

- Detection Limit : Toluene, 3,5,5-Trimethyl-2-cyclohexene-1-one = 100 μ g/m²,

Ethylbenzene = 2 500, Xylene(모든 이성체) = 500 μg/㎡,

1,3,5-Trimethylbenzene (mesitylene), Trichloroethylene = 1 500 μ g/m²,

Trichloroethylene, Nitrobenzene = 30 μg/m³,

n-Hexane = $1000 \mu g/m^3$,

Cyclohexanone = 50 µg/m³

²⁻Methoxyethyl acetate, 2-Ethoxyethanol, 2-Ethoxyethyl acetate, Bis(2-methoxyehtyl) ether, 2-Methoxypropyl acetate = 0.1 mg/L, Methanol = 5 mg/L, Nitrobenzene = 0.02 mg/L, Cyclohexanone = 46 mg/L,

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Test		Wood Preservatives(Outdoor limits)							
Category	2,4- Dichlorophenol	2,4,6- Trichlorophenol	2,4,5- Trichloropheno	2,3,4,6- Tetracholrophenol	Pentachlorophenol	Lindane	Conclusion		
CAS NO.	-	-	-	-	-	58-89-9			
Requirement	≤ 5 mg/kg	≤ 5 mg/kg	≤ 10 mg/kg	≤1 mg/kg	≤ 2 mg/kg	≤ 2 mg/kg	-		
Results	N/A	N/A	N/A	N/A	N/A	N/A	N/A		

- Detection Limit: 2,4-Dichlorophenol, 2,4,6-Trichloropheno = 5 mg/kg,

2,4,5-Trichloropheno = 10 mg/kg, 2,3,4,6-Tetracholrophenol = 1 mg/kg, Pentachlorophenol, Lindane = 2 mg/kg

Test	Wood Preservatives(Indoor limits)						
Category	Cyfluthrin	Cypermethrin	Deltamethrin	Permethrin	Conclusion		
CAS NO.	68359-37-5	52315-07-8	52918-63-5	52645-53-1			
Requirement	≤ 10 mg/kg	≤ 10 mg/kg	≤ 10 mg/kg	≤ 10 mg/kg	-		
Results	N/A	N/A	N/A	N/A	N/A		
- Detection Limi	it : 10 mg/kg						

	Preservatives						
Test Category	Phenol	1,2- Benzylisothiazolin -3-one	2-Methyl-4- isothiazolin-3-one	5-Chloro-2-methyl-4- isothiazolin-3-one	5-Chloro-2-methyl- 4-isothiazolin-3-one + 2-methyl-4- isothiazolin-3-one	Formaldehyde (free)	Conclusion
CAS NO.	108-95-2	2634-33-5	2682-20-4	26172-55-4	-	50-00-0	
Requirement	≤ 10 mg/kg	≤ 5 mg/kg	Not Used	Not Used	Not Used	≤ 0.05 %	-
Results	N/A	N/A	N/A	N/A	N/A	N/A	N/A

- Detection Limit : Phenol, 1,2-Benzylisothiazolin-3-one = 5 mg/kg

2-Methyl-4-isothiazolin-3-one = 0.25 mg/kg

5-Chloro-2-methyl-4-isothiazolin-3-one = 0.75 mg/kg

5-Chloro-2-methyl-4-isothiazolin-3-one + 2-methyl-4-isothiazolin-3-one = 1 mg/kg

Formaldehyde = 0.002 %

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Test	Test Plasticisers(migration)					
Catego	egory Triphenyl phosphate		Tri-o-cresyl phosphate	Tri-m-cresyl phosphate	Tri-p-cresyl phosphate	Conclusion
CAS	NO. 115-86-6		78-30-8	563-04-2	78-32-0	
Require	ment	≤ 0.03 mg/L	≤ 0.03 mg/L	≤ 0.03 mg/L	≤ 0.03 mg/L	-
Results	#6	< 0.03 (Not Detected)	< 0.03 (Not Detected)	< 0.03 (Not Detected)	< 0.03 (Not Detected)	Pass
- Detect	tion Li	mit : 0.03 mg/L	(Not Detected)	(Not Detected)	(Not Detected)	1

Test Category	Requirement	Results	Conclusion
Ethyl Acetate	≤ 100 mg/kg	N/A	N/A
Methyl Alcohol	≤ 100 mg/kg	N/A	N/A

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■ Common Safety Standards for Children's Product (#1)

Test	Category	Requirement	Results	Conclusion
4.1 Small Part	4.1.1 For children under 36 months	Toys intended for children under 36 months, removable components thereof and components liberated during testing in accordance with reasonably foreseeable abuse tests, shall not fit entirely, whatever their orientation, into the small parts cylinder when tested in accordance with small parts test.	Not fit entirely in the small parts cylinder	Pass
Part -	4.1.2 For children 36 months and over but under 72 months	Toys and toys containing removable components, intended for children 36 months and over but under 72 months, which fit entirely in the small parts cylinder when tested in accordance with small parts test, shall carry a warning.	N/A	N/A
S	4.2.1 Accessible Sharp Edges of Glass or Metal	Accessible edges on product for children under 96 months shall not be hazardous sharp edges when tested in accordance with sharp edge test. Potentially sharp glass or metal edges shall be considered non-accessible and exempt from the test if they lie adjacent to a surface of the test sample, and any gap between the edge and the adjacent surface does not exceed 0.5 mm. Edges of pieces intended to serve as electrical conductors and microscope slides and cover slips are considered as functional edges and do not require a warning.	N/A	N/A
		Product for children under 36 months shall not have accessible hazardous functional sharp edges.	N/A	N/A
4.2 Sharp Edges	4.2.2 Functional Sharp Edges	Product for children over 36 months which by reason of their function(e.g. functional children scissors and functional children tool kits) necessarily include a sharp edge and which do not include any non-functional sharp edges are exempt from the test provided the packaging carries a warning.	N/A	N/A
	4.2.3 Edges on Metal Children Product	Accessible metal edges including those of holes and slots on product for children under 96 months shall be free of hazardous burrs and feathering or shall be hemmed, rolled or curled. Or shall incorporate a affixed protective equipment.	N/A	N/A
	4.2.4 Edges on Moulded Children	Accessible edges, corners or mould parting areas of moulded product for children under 96 months shall be free of hazardous sharp edges produced by burrs and flash.	No sharp edges were found	Pass
	Product	Or shall incorporate a affixed protective equipment.		
	4.2.5 Edges on Exposed Bolts or Threaded Rods	Accessible ends of threaded bolts or threaded rods shall be free of sharp edges and burrs. Or the ends shall be covered by smooth protective caps.	N/A	N/A

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Test	Category	Requirement	Results	Conclusion
4.3 Sharp Points	4.3.1 Accessible Sharp Points	Accessible points on product for children under 96 months, shall not be hazardous sharp points when tested in accordance with sharp points test. Potentially sharp points shall be considered non-accessible if they lie adjacent to a surface of the test sample and any gap between the point and the adjacent surface does not exceed 0.5 mm. Points on product for children under 36 months, whose largest cross-sectional dimension is 2 mm or less and which do not necessarily present a sharp point when tested in accordance with sharp point test, are considered to be potentially hazardous sharp points.	No sharp points were found	Pass
		Product for children under 36 months shall not have accessible hazardous functional sharp points.	N/A	N/A
	4.3.2 Functional Sharp Points	Product for children over 36 months which by reason of their function(e.g. children product with a needle) necessarily present the sharp points and which do not include any non-functional sharp points are exempt from the test provided the packaging carries a warning.	N/A	N/A
	4.3.3 Wooden Children Product	Accessible surfaces and edges of wood used in children product shall be free of splinters.	N/A	N/A
	4.4.1 Magnetic/Electri cal Experimental Sets Intended for Children 96 months and over	Magnetic/electrical experimental sets intended for children 96 months and over that contain magnetic components shall carry a warning if they both - have a magnetic flux index equal to or greater than 50 kG²mm² (0.5 T²mm²) when tested according to magnetic flux index - fit entirely in the cylinder when tested according to small parts test "warning! Not suitable for children under 8 years. This product contains a small magnet(s). Swallowed magnets can stumble together over long periods and cause serious injury. If you swallow the magnet, you should immediately seek medical attention."	N/A	N/A
4.4 Magnets and		Any loose-as received magnet and magnetic component either shall have a magnetic flux index less than 50 kG ² mm ² (0.5 T ² mm ²) when tested in accordance with magnetic flux index, or shall not fit entirely in the cylinder when tested in accordance with small parts test.	N/A	N/A
Magnetic Compone nts	4.4.2 All children	Wooden children product, children product intended to be used in water and mouth pieced of mouth-actuated children product with magnets or magnetic components shall be tested in accordance with soaking test for magnets before the test.	N/A	N/A
	products with magnets and magnetic components	The following tests shall be carried out in the prescribed order on all unique magnetic components. Any magnets and magnetic components that become liberated from a children product, or from a loose-as-received magnetic component either shall, when tested according to tests listed below, have a magnetic flux index less than 50 kG²mm² (0.5 T²mm²) when tested in accordance with magnetic flux index, or shall not fit entirely in the cylinder when tested in accordance with small parts test. tension test for magnets, drop test, tip over test for large and bulky children product, torque test, general procedure, tension test for seams in stuffed children product, beanbag-type children product and other similar filled children product, compression test	N/A	N/A

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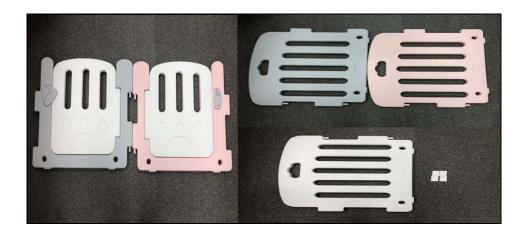
Test Category	Requirement	Results	Conclusion
4.5 Glass	It should not be used in children's products intended for use by children less than 36 months, and should be warned in children's products used for over 36 months.	N/A	N/A
5. Electrical safety requirements	The lithium secondary batter (excluding nickel-based batteries) in children's products must have independent control and protection. Moreover, It have to hold ensure correct documentation (international certification test report or certificate, electrical equipment or industrial safety certificate, self-test report, etc.) and an electrical appliances safety certificate for the charger used. The criteria for the establishment of safety standards or the strengthening of the acceptance criteria shall be applied from the date of issue or customs clearance after February 1, 2018, and shall be excluded from Pass or fail judgment according to the inspection result of inspection report	N/A	N/A

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- Product Photo -



End.