Beide
Compliance Laboratory

APPLICATION FOR SAFETY OF TOYS DIRECTIVE

On Behalf of

Zhejiang Baijie Arts & Crafts Co., Ltd.

Wooden toys

Model: CSDW-005, CSDW-006, CSDW-007, CSDW-008, CSDW-009, CSDW-010, CSDW-011, CSDW-012, CSDW-013, CSDW-014, CSDW-015, CSDW-016, CSDW-017, CSDW-018, CSDW-019, CSDW-020, CSDW-021, CSDW-022, CSDW-023, CSDW-024, CSDW-025, CSDW-026, CSDW-027, CSDW-028, CSDW-029, CSDW-030, CSDW-031, CSDW-032, CSDW-033, CSDW-034, CSDW-035, CSDW-036, CSDW-037, CSDW-038, CSDW-039, CSDW-040, CSDW-041, CSDW-042, CSDW-043, CSDW-044, CSDW-045, CSDW-046, CSDW-047, CSDW-048, CSDW-049, CSDW-050, CSDW-051, CSDW-052, CSDW-053, CSDW-054, CSDW-055, CSDW-056, CSDW-057, CSDW-058, CSDW-059, CSDW-060

Prepared For : **Zhejiang Baijie Arts & Crafts Co., Ltd.**
Building 10, No. 19, Chaoyang Road, Bailongshan Street, Yunhe County, Lishui City, Zhejiang Province, China

Prepared By : **Beide (Shenzhen) Product Service Limited**
6F, Bldg E, Hourui 3rd Ind Zone, Xixiang, Bao'an Dist, Shenzhen, China

Date of Test	:	**Apr. 14-23, 2021**
Date of Report	:	**Apr. 23, 2021**
Report Number	:	**B-S210435969**

Safety of Toys Report
EN 71
Safety of toys-
Part 1: Mechanical and Physical properties
Part 2: Flammability
Part 3: Migration of certain elements

Testing laboratory ……:	Beide (Shenzhen) Product Service Limited
Address …….	6F, Bldg E, Hourui 3rd Ind Zone, Xixiang, Bao'an Dist, Shenzhen, China
Report body…….. .. …. ……..:	Beide (Shenzhen) Product Service Limited
Address……..:	6F, Bldg E, Hourui 3rd Ind Zone, Xixiang, Bao'an Dist, Shenzhen, China
Applicant …… :	Zhejiang Baijie Arts & Crafts Co., Ltd.
Address …….	Building 10, No. 19, Chaoyang Road, Bailongshan Street, Yunhe County, Lishui City, Zhejiang Province, China
Client No……..:	0578C357
Standard ……..……:	EN 71-1:2014+A1:2018; EN 71-2: 2011+A1:2014; EN 71-3: 2019
Test Result ……..……:	Compliance with EN 71-1:2014+A1:2018; EN 71-2: 2011+A1:2014; EN 71-3: 2019
Non-standard test method ……..:	N.A.
Type of test object ……..:	Wooden toys
Trademark …….. .:	N.A.
Model/type reference ……..:	CSDW-005
Manufacturer ……..:	Zhejiang Baijie Arts & Crafts Co., Ltd.
Address …….	Building 10, No. 19, Chaoyang Road, Bailongshan Street, Yunhe County, Lishui City, Zhejiang Province, China

Possible test case verdicts :	
test case does not apply to the test object …….. :	N(.A.)
test object does meet the requirement …….. :	P(ass)
test object does not meet the requirement ……. :	F(ail)

Name and address of the testing laboratory: **Beide (Shenzhen) Product Service Limited**
6F, Bldg E, Hourui 3rd Ind Zone, Xixiang,
Bao'an Dist, Shenzhen, China

Reported by : Signature / Anna Deng / Engineer — Apr. 23, 2021 Date

Checked by : Signature / Austin Zhong / Engineer — Apr. 23, 2021 Date

Approved by : Signature / [illegible] / Manager — Apr. 23, 2021 Date

BEIDE (SHENZHEN) PRODUCT SERVICE LIMITED
Beide Compliance Laboratory
CERTIFICATION

General remarks:	
"(see remark #)" refers to a remark appended to the report. Square watermelon "(see appended table)" refers to a table appended to the report. Throughout this report a comma is used as the decimal separator. The test results presented in this report relate only to the object tested. This report shall not be reproduced except in full without the written approval of the testing laboratory.	Attached with: 1. one page of photo documentation. 2. one page of marking label. Remark:

EN 71-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
4.	General requirements		P
4.1	Material cleanliness		P
4.2	Assembly		N
4.3	Flexible plastic sheeting		N
	Toys with flexible plastic sheeting shall conform to the following requirements.		N
	a) Sheets without any backing and of an area greater than 100 mm × 100 mm shall have an average thickness of 0,038 mm or more.		N
	b) Sheets with an average thickness of less than 0,038 mm and of an area greater than 100 mm × 100 mm shall be perforated with defined holes so that a minimum of 1 % of the area has been removed over any area of 30 mm × 30 mm.		N
	c) For plastic balloons the requirements in item a) apply to double layers of plastic sheeting		N
4.4	Toy bags		N
	Toy bags with an opening perimeter greater than 380 mm having a drawstring as a means of closure shall either:		N
	a) be made of material permeable to air		N
	b) comply with the requirements given in 4.14.2a).		N
4.5	Glass	No glass	N
	Accessible glass may be used in the construction of toys for children over 36 months where		N
	a) its use is necessary to the function of the toy		N
	b) it is textile glass used for reinforcement;		N
	c) it is in the form of solid glass marbles or solid glass eyes for dolls.		N
4.6	Expanding materials		N
	Toys and components of toys made of expanding materials, which fit entirely in the cylinder specified in 8.2, shall not expand more than 50 % in any dimension when tested according to 8.14 (expanding materials).		N
4.7	Edges		P

EN 71-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
	Accessible edges shall not present an unreasonable risk of injury.		P
	a) Edges of metal or glass on toys are considered as potentially hazardous sharp edges if they are sharp as determined according to 8.11 (sharpness of edges).		N
	b) In overlap joints, when the clearance between the sheet metal having a thickness of 0.5 mm maximum and the underlying surface is greater than 0.7 mm		N
	c) Edges of metal (including fastenings, e.g. screw heads) and of rigid polymeric material shall be free from burr capable of causing wound or abrasion.		N
	d) Where it is essential for the functioning of the toy (cover slips), sharp edges may be used in toys intended for children over 36 months.		N
4.8	Points and metallic, wires		N
	Wires and accessible points shall not present an unreasonable risk of injury		N
	a) Points on toys are considered as potentially hazardous sharp points if they are sharp as determined according to 8.12 (sharpness of points).		N
	b) Where it is essential for the functioning of the toy, sharp points may be used in toys intended for children over 36 months.		N
4.9	Protruding parts		N
	Tubes and rigid components in the form of projections which constitute a puncture hazard to a child are protected.		N
	For toy scooters, the handle grips shall be of a resilient material and have an enlarged end with a minimum diameter of 40mm.		N
	The ends of spokes on toy umbrellas shall be protected.		N
4.10	Parts moving against each other	No such parts	N
4.10.1	Folding and sliding mechanisms		N

EN 71-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
	a) Toy pushchairs and perambulators, incorporating a handle or other structural member which can fold down over a child, shall have at least one main locking device and at least one secondary locking device, both of which act directly on the folding mechanism.		N
	b) Toy pushchairs and perambulators that otherwise do not constitute a hazard of a handle or other structural member folding down over a child, shall have at least a locking device or a safety stop, which may be manual in operation.		N
	c) Folding devices on other collapsible toys (e.g. ironing boards, folding chairs and tables, etc.) and which may have a scissor-like action shall have:		N
	d) Toys other than those covered by items a), b) or c) above, with folding or sliding mechanisms intended to bear or capable of bearing the mass of a child and capable of injuring fingers, shall be so constructed that the space between moving elements, if it allows a 5 mm diameter rod to be inserted, shall also allow a 12 mm diameter rod to be inserted.		N
	e) Accessible folding mechanisms on toy scooters shall be so constructed that if the space between folding elements allows a 5mm diameter rod to be inserted and a 12mm diameter rod to be inserted.		N
	Accessible sliding mechanisms shall be so constructed that no opening shall allow a 5mm diameter rod to be inserted.		N
4.10.2	Driving mechanisms		N
	Driving mechanisms and winder keys shall conform to the following requirements.		-
	a) Driving mechanisms 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
	b) Driving mechanisms within large and bulky toys.		N
	c) The shape and dimensions of winder keys or starting handles shall be such that the clear space between the key or the handle and the body of the toy		N
4.10.3	Hinges		N
4.10.4	Springs	No springs	N

EN 71-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
	Springs shall conform to the following requirements.		-
	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
	b) 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
	c) 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 force of 40 N or more.		N
4.11	Mouth-actuated toys and other toys intended to be put in the mouth	Not such toys	N
	a) Mouth-actuated toys and removable mouthpieces of mouth-actuated toys shall not fit entirely in the cylinder		N
	b) Non-detachable mouthpieces of mouth-actuated toys		N
	c) Mouth-actuated toys which contain loose components such as spheres in a whistle or reeds in a noisemaker shall not release any objects that fit entirely in the cylinder		N
	d) Removable or non-detachable mouthpieces, fitted to balloons, shall conform to the requirements in items a) and b).		N
4.12	Balloons	No such balloons	N
4.13	Cords of toy kites and other flying toys	No such balloons	N
4.14	Enclosures		N
4.14.1	Toys which a child can enter		N
	Toys which a child can enter shall conform to the following requirements:		-
	a) Any toy having a door, lid or similar device, shall provide at least two unobstructed ventilation holes		N
	b) it shall be possible to open the door, lid or similar device by applying a force of 50 N maximum from the inside.		N

EN 71-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
	c) Toy chests with vertically opening hinged lids shall be provided with lid-support mechanisms to prevent sudden collapse or dropping of the lid.		N
4.14.2	Masks and helmets	Not such toys	N
	a) Masks and helmets shall provide a total ventilation area of 1 300 mm2 minimum through at least two holes at least 150 mm apart or through any equivalent single ventilation area.		N
	b) All rigid materials that cover the face not expose sharp edges, sharp points or loose parts that could enter the eye.		N
	c) Toys that are imitations of protective masks and helmets shall carry a warning.		N
4.15	Toys intended to bear the mass of a child	Not such toys	N
4.15.1	Toys propelled by the child or by other means		N
4.15.1.1	General		N
	—ball, inline skates and skateboards intended for children with a body mass of 20 kg or less.		N
	—tricycles, cars, hand carts, moon-hoppers and pogo sticks.		N
4.15.1.2	Warnings and instructions for use		N
	Toys intended to bear the mass of a child shall be accompanied by instructions for use assembly and maintenance instructions.		N
	The potential dangers of using the toy and the precautions to be taken shall be brought to the attention of the user.		N
4.15.1.3	Strength		N
	Toys, when tested according to static strength and dynamic strength shall not:		-
	a) produce accessible sharp edges;		N
	b) produce accessible sharp points;		N
	c) make driving mechanisms accessible that present a hazard of crushing the fingers or other parts of the body;		N
	d) collapse such that they do not continue to conform to the relevant requirements		N

EN 71-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
4.15.1.4	Stability		N
4.15.1.5	Braking		N
	The requirement does not apply to:		-
	– roller skates, inline skates and toy skateboards;		N
	– Toys where the hands or feet provide the motive power to the driving wheel or wheels via direct transmission.		N
	– Electrically propelled ride-on toys which are propelled at a maximum speed of 1m/s unloaded, having a seat height below 300mm and in which the feet are free.		N
	a) Mechanically or electrically propelled toys with a free-wheeling facility shall have a brake in a braking position.	Not electrically propelled toys	N
	b) The toy when tested according brake performance for toys other than toy bicycles, shall not move more than 5cm;		N
	c) For toy scooters, the force to hold the toy on the inclined plane shall be 50N+5N.		N
4.15.1.6	Transmission and wheel arrangement	No such devices	N
	a) Propelling chains shall have, at the side where the leg of the child is nearest the chain, a shield from the crank to the gear wheel and, on the opposite side, a shield around the crank. The shield shall not have slots or holes with a width greater than 5 mm.		N
	b) Wheels directly propelled by pedals shall not have slots or holes with a width greater than 5 mm.		N
	c) Spaces between the wheels and the body or parts of the body shall, if they allow a 5 mm diameter rod to be inserted, also allow a 12 mm diameter rod to be inserted.		N
	d) Tricycles, provided with an attached handle used for pushing the child, shall be constructed in such a way as to prevent entrapment of the child's feet in the pedals etc. whilst being pushed		N
4.15.1.7	Adjustable seat pillar and handlebar stem minimum insertion marks	Not such toys	N

EN 71-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
	Any adjustable seat pillar and adjustable handlebar stem shall have a permanent mark that indicates the minimum insertion depth of the part into the frame of the toy.		N
4.15.1.8	Electrically-driven ride-on toys	Not such toys	N
4.15.2	Toy bicycles	Not such toys	N
4.15.2.1	General		N
4.15.2.2	Warnings and Instructions for use		N
4.15.2.3	Braking requirements		N
4.15.3	Rocking horses and similar toys		N
	Rocking horses and similar toys shall conform to the following requirements:	Not rocking horses	-
	a) The bow rocker of any bow-mounted rocking horse or other rocking toy shall have a limit to its movement which shall at all times hold the user within the extreme of the bow. Compliance is checked by visual inspection.		N
	b) The toy shall not tip over when tested according to 8.23.1 (stability, toys intended to bear the mass of a child).		N
	c) Toys shall not collapse so that they do not continue to conform to relevant requirements of this European Standard when tested according to 8.21 (static strength).		N
	d) Toys that due to their construction, strength, design or other factors are not suitable for use by children of 36 months and over shall carry a warning (see 7.16).		N
	e) Toys where the intended sitting surface is 600 mm or more above the ground, shall carry a warning (see 7.19).		N
4.15.4	Toys not propelled by a child		N
4.15.5	Toy scooters		N
4.15.5.1	General		N
4.15.5.2	Warnings and instructions for use		N
4.15.5.3	Strength		N
4.15.5.4	Adjustable and folding steering tubes		N

EN 71-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
	To prevent sudden changes of height, steer tubes with adjustable height shall:		-
	– be adjustable with the use of a tool		N
	– 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.		N
4.15.5.5	Braking		N
4.15.5.6	Wheel size		N
4.15.5.7	Protruding parts		N
4.16	Heavy immobile toys	Not such toys	N
4.17	Projectiles		N
4.17.1	Projectiles and projectile toys shall conform to the following requirements.		-
	a) All rigid projectiles shall have a tip radius of not less than 2 mm.		N
	b) Resilient materials used as impact surfaces shall not become detached		N
	c) Projectiles with a suction cup as impact area shall have a length of 57 mm or more		N
4.17.2	Projectile toys without stored energy		N
	a) Projectiles in the form of darts shall have blunted points or points that are protected by a resilient material		N
	b) Helicopter rotors and single propellers, shall have a ring around the perimeter in order to reduce the risk of injuries.		N
4.17.3	Projectile toys with stored energy		N
	a) The maximum kinetic energy of projectiles, shall not exceed: 1) 0,08 J for rigid projectiles without resilient impact surfaces; 2) 0,5 J for resilient projectiles or projectiles with resilient impact surfaces		N
	b) the potential danger shall be drawn to the attention of the user		N

EN 71-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
4.17.4	Bows and arrows	Not such toys	N
	Arrows discharged from a bow shall comply with the following requirements.		-
	a) Points of arrows shall not be made of metal, points fitted with magnetic metal discs are permitted if the disc has a minimum area of 3 cm^2.		N
	b) The maximum kinetic energy of arrows discharged from a bow shall not exceed the limited values		N
	c) Arrows whose maximum kinetic energy exceeds 0.08 J shall comply with 4.17.3b).		N
4.18	Aquatic toys and inflatable toys	Not such toys	N
	a) All air inflation inlets shall have stoppers permanently attached to the toy.		N
	b) The potential danger of using aquatic toys shall be drawn to the attention of the user.		N
4.19	Percussion caps specifically designed for use in toys and toys using percussion caps		N
4.20	Acoustics		N
4.21	Toys containing a non-electrical heat source	No heat source	N
	a) Toys containing a heat source shall not ignite when used at the maximum input.		N
	b) The temperature rise of all handles, knobs and similar parts which are likely to be touched by hand shall not exceed the limited values.		N
	c) The temperature rise of other accessible parts of the toy, shall not exceed the limited values		N
4.22	Small balls		N
4.23	Magnets		P
4.24	Yo-yo balls		N
4.25	Toys attached to food		N
5.	Toys intended for children under 36 months		N
5.1	General requirements		N
5.2	Soft-filled toys and soft-filled parts of a toy		N

EN 71-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
5.3	Plastic sheeting		N
5.4	Cords, chains and electrical cables in toys		N
5.5	Liquid-filled toys		N
5.6	Speed limitation of electrically-driven ride-on toys		N
	Electrically-driven ride-on toys shall have a maximum design speed of 6 km/h or less when tested according to 8.29 (determination of maximum design speed of electrically-driven ride-on toys).		N
5.7	Glass and porcelain		N
5.8	Shape and size of certain toys		N
5.9	Toys comprising monofilament fibres		N
5.10	Small balls		N
5.11	Play figures		N
5.12	Hemispheric-shaped toys	Not hemi spheric	N
5.13	Suction cups		N
5.14	Straps intended to be worn fully or partially around the neck		N
6.	Packaging		P
	a) Bags made of flexible plastics, with an opening perimeter greater than 380 mm used for external or internal packaging, shall have an average sheet thickness of not less than 0,038 mm when tested according to 8.26.1.		N
	b) Bags made of flexible plastics with an opening perimeter greater than 380 mm shall not have a draw-string or cord as a means of closing.		N
7.	Warnings, markings and instructions for use		P
7.1	General		--
	Warnings on toys shall not be misleading or incorrect.		P
	A toy shall not bear a warning that conflicts with the intended use of the toy, as determined by virtue of its function, dimension and characteristics.		P

EN 71-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
	The warnings shall be preceded by the words 'Warning' or 'Warnings', as appropriate. The word "Warning" or "Warnings" may be followed by e.g. an exclamation mark.		P
	The manufacturer shall mark the warnings in a clearly visible, easily legible and understandable and accurate manner on the toy, on an affixed label or on the packaging.		P
7.2	Toys not intended for children under 36 months		P
	"Warning. Not suitable for children under 36 months" or "Warning. Not suitable for children under three years"		P
	Symbol		P
7.3	Latex balloons	No such balloons	N
7.4	Aquatic toys		N
7.5	Functional toys		N
7.6	Hazardous sharp functional edges and points		N
7.7	Projectiles		N
7.8	Imitation protective masks and helmets		N
7.9	Toy kites		N
7.10	ball, inline skates, skateboards and certain other ride-on toys		N
7.11	Toys intended to be attached to or strung across a cradle, cot, or perambulator		N
7.12	Liquid-filled teethers		N
7.13	Percussion caps specifically designed for use in toys		N
7.14	Acoustics		N
7.15	Toy bicycles		N
7.16	Toys intended to bear the mass of a child		N
7.17	Toys comprising monofilament fibres		N
7.18	Toy scooters		N
7.19	Rocking horses and similar toys		N
7.20	Magnetic/electrical experimental sets		N

EN 71-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
7.21	Toys with electrical cables exceeding 300 mm in length		N
7.22	Toys with cords or chains intended for children of 18 months and over but under 36 months		N
8.	Test methods		P
8.1	General requirements for testing		P
8.2	Small parts cylinder		P
8.3	Torque test		P
	A component can be gripped between thumb and forefinger, apply a torque gradually to the component within a period of 5 s in a clockwise direction until either:		P
	a) a rotation of 180º from the original position has been attained		P
	b) a torque of 0.34 Nm is reached. Maintain the maximum rotation or required torque for 10 s.	Not become to disassemble.	P
8.4	Tension test		P
8.4.1	Apparatus		-
8.4.1.1	A tensile testing machine or a dead-weight arrangement, with means of applying forces up to at least 90 N with an accuracy of 2 N.		P
8.4.1.2	Clamps and straps		P
8.4.1.3	Feeler gauge, with a thickness of 0.4 mm ± 0.02 mm and an insertion edge radius of approximately 3 mm		P
8.4.2	Procedure		-
8.4.2.1	General		P
	— 50 N ± 2 N when the largest accessible dimension is 6 mm or less; or		N
	— 90 N ± 2 N when the largest accessible dimension is greater than 6 mm.		P
	Apply the force gradually within a period of 5 s. Maintain the force for 10 s. Determine whether the component has become detached.		P
8.4.2.2	Seams and materials		P

EN 71-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
8.4.2.3	Protective components		N
	Subject the part to be tested to a tensile force of 60 N ± 2 N.		N
8.5	Drop test		P
8.6	Tip over test		P
8.7	Impact test		P
	Place the toy in the most vulnerable position on a plane, horizontal steel surface and drop a metallic weight with a mass of 1 kg ± 0,02 kg, distributed over an area of diameter 80 mm ± 2 mm, through a distance of 100 mm ± 2 mm onto the toy.		P
8.8	Compression test		P
	Place the toy on a horizontal rigid surface with the part of the toy to be tested uppermost. Apply a compression force of 110 N ± 5 N through a rigid metal disc 30 mm ± 1,5 mm in diameter to the area to be tested. Ensure that the perimeter of the disc is rounded.		P
	Apply the force gradually within a period of 5 s. Maintain the force for 10 s.		P
8.9	Soaking test		P
8.10	Accessibility of a part or component		N
8.11	Sharpness of edges	No sharpness of edges	P
8.12	Sharpness of points		N
8.13	Flexibility of metallic, wires		N
8.14	Expanding materials		N
	Condition the toy or component at 20 °C ± 5 °C and at a relative humidity of 40 % to 65 % for at least 7 h before the test. Measure the maximum dimensions of the toy or any removable components in the x, y and z directions using callipers. Submerge the toy completely in a container of demineralized water at 20 °C ± 5 °C for 24 h ± 0,5 h. Ensure that excess water is used, i.e. there is surplus water at the end of the test.		N
	Remove the item using a pair of tongs. If the item cannot be removed because of insufficient mechanical strength then it is considered to pass this test.		N

EN 71-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
	Allow excess water to drain for 1 min and remeasure the item.		N
	Calculate the expansion in the x, y and z dimensions as a percentage of the original dimension.		N
8.15	Leakage of liquid filled toys		N
8.16	Geometric form of certain toys		N
8.17	Durability of mouth-actuated toys		N
8.18	Folding or sliding mechanisms		N
8.18.1	Loads		N
8.18.2	Toy pushchairs and perambulators		N
8.18.3	Other collapsible toys		N
8.19	Electric resistivity of cords	Not electric toys	N
8.20	Cords cross-sectional dimension		N
8.21	Static strength		N
	For toy scooters intended for children with a body mass between 20kg and 50kg, the load shall be 100kg±1kg. the approximate diameter of the base of this load shall be 150mm.		N
8.22	Dynamic strength		N
8.23	Stability		N
8.23.1	Toys intended to bear the mass of a child		N
	Load the toy in the most onerous position with a mass of 50kg±0.5kg on its standing or sitting surface. And place the toy on a 10°±1° slope in the most onerous position with respect to stability.		N
8.23.2	Heavy immobile toys		N
8.24	Determination of kinetic energy	Not such toys	N
8.24.1	Kinetic energy of projectiles		N

EN 71-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
	Measure the kinetic energy of the toy under normal conditions of use by a means that is capable of determining the energy to an accuracy of 0,005 J. Take five measurements. Take the kinetic energy as the maximum of the five readings. Ensure that the readings are taken in such a way that the maximum energy is determined.		N
8.24.2	Kinetic energy of bows and arrows		N
	For bows, use an arrow intended for the bow and stretch the bow string, using a force of 30 N or less, as far as the arrow allows but to no more than 70 cm.		N
8.25	Plastic sheeting		N
8.25.1	Thickness		N
8.25.1.1	Apparatus		N
	Measuring device, capable of measuring thickness to an accuracy of 1 4m according to ISO 4593.		N
8.25.1.2	Procedure		N
	Cut along the seams of plastic bags, without stretching, into two single sheets.		N
	Measure the thickness of any sheet at 10 equidistant points across the diagonal of any area having dimensions of at least 100 mm × 100 mm and average the readings.		N
8.25.2	Adhesion		N
8.26	Brake performance		N
8.27	Strength of toy scooter steering tubes		N
8.28	Determination of emission sound pressure levels		N
8.29	Determination of maximum design speed of electrically-driven ride-on toys		N
8.30	Measurement of temperature rises		N
8.31	Toy chest lids		N
8.32	Small balls and suction cups test		N
8.33	Test for play figures		N
8.34	Tension test for magnets		P

EN 71-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
8.35	Magnetic flux index		P
8.36	Perimeter of cords and chains		N
8.37	Yo-yo balls measurements		N
8.38	Breakaway feature separation test		N
8.39	Self-retracting cords		N
8.40	Length of cords, chains and electrical cables		N
ANNEX A	Background and rationale for this standard		P
A.1	Scope		P
A.2	Material		P
A.3	Assembly		N
A.4	Flexible plastic sheeting		N
A.5	Glass	No glass	N
A.6	Expanding materials		N
A.7	Edges	No hazards	N
A.8	Points and wires		N
A.9	Protruding parts		N
A.10	Folding and sliding mechanisms		N
A.11	Driving mechanisms		N
A.12	Hinges		N
A.13	Springs		N
A.14	Mouth-actuated toys		N
A.15	Balloons		N
A.16	Cords of kites		N
A.17	Toys which a child can enter		N
A.18	Masks and helmets		N
A.19	Toys intended to bear the mass of a child		N
A.20	Swings	Not swings	N

EN 71-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
	Swings for children over 36 months which a child can climb on are tested with a mass of 200 kg. For multi-swings, each swing, T-bar or swing-boat is loaded in turn with 200 kg for 1 h.		N
	A centre swinging pole on, for example, a climbing frame is tested as if it were a swing, using a 200 kg load.		N
A.21	Rocking horses and similar toys		N
A.22	Toys not propelled by a child		N
A.23	Projectiles		N
A.24	Aquatic toys		N
A.25	Percussion caps specifically designed for use in toys		N
A.26	Acoustics		N
A.27	General requirements for toys intended for children under 36 months		N
A.28	Filling materials		N
A.29	Adhesion of plastic sheeting		N
A.30	Cords on toys		N
A.31	Liquid filled toys		N
A.32	Shape and size of certain toys		N
A.33	Toys comprising monofilament fibres		N
A.34	Warnings and instruction for use		P
A.35	Warning for toys not intended for children under 36 months		P
A.36	Warnings in connection with functional toys		N
A.37	Small parts cylinder		N
A.38	Tension test		P
A.39	Impact test		P
A.40	Compression test		P
A.41	Sharpness of points		N
A.42	Flexibility of wires		N

EN 71-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
A.43	Leakage of liquid filled teethers		N
A.44	Geometric form of certain toys		N
A.45	Durability of mouth-actuated toys		N
A.46	Folding or sliding mechanisms		N
A.47	Static strength		N
A.48	Kinetic energy of projectiles, bows and arrows		N
A.49	Small balls		N
A.50	Toys scooters		N
A.51	Hemispheric-shaped toys		N
A.52	Magnets		P
A.53	Yo-yo balls		N
A.54	Straps intended to be worn fully or partially around the neck		N
A.55	Suction cups		N
A.56	Toys attached to food		N
A.57	Packaging		P

EN 71-2			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
4.	Requirements		P
4.1	General		--
	The following materials shall not be used in the manufacture of toys:		--
	- celluloid (cellulose nitrate) and materials with the sanie beliaviour in fire (except when used in varnish or paint)	Not be used	P
	- materials with a pile surface which produces surface flash on the approach of a flame.		N
4.2	Toys to be worn on the head		N
4.2.1	General		--
4.2.2	Beards, moustaches, wigs etc., made from hair, pile or material with similar features (e.g. free-hanging ribbons, paper, cloth strands or other flowing elements), which protrude 50 mm or more from the surface of the toy	No such device	N
4.2.3	Beards, moustaches, wigs etc., made from hair, pile or material with similar features (e.g. free-hanging ribbons, paper, cloth strands or other flowing elements), which protrude less than 50 mm from the surface of the toy		N
4.2.4	Full or partial moulded head masks		N
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 masks not covered by 4.2.4 which partially or fully cover the head (e.g. fabric and cardboard masks, eye masks, face masks), but excluding those items covered by 4.3		N
4.3	Toy disguise costumes and toys intended to be worn by a child in play		N
4.4	Toys intended to be entered by a child		N
4.5	Soft-filled toys		N
	When tested in accordance with 5.5, the rate of spread of flame on the surface shall not be more than 30 mm/s or the toy shall self-extinguish.		N
5.	Methods of test		N
5.1	General		--

EN 71-2			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
5.1.1	Test burner		N
5.1.2	Conditioning and test chamber		N
5.1.3	Test flame		N
	The test flame is obtained from a burner operated with butane or propane gas as appropriate.		N
5.2	Test relating to beards, moustaches, wigs etc., made from hair, pile or material with similar features (e.g. free-hanging ribbons, paper, cloth strands or other flowing elements), which protrude more than or equal to 50 mm from the surface of the toy		N
5.3	Test relating to beards, moustaches, wigs etc., made from hair, pile or material with similar features (e.g. free-hanging ribbons, paper, cloth strands or other flowing elements), which protrude less than 50 mm from the surface of the toy and full or partial moulded head masks (see A.8)		N
5.4	Test relating to 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 masks not covered by 4.2.4 which partially or fully cover the head (e.g. fabric and cardboard masks, eye masks, face masks), disguise costumes and toys intended to be entered by a child (see A.9)		N
5.5	Test for soft-filled toys		N

EN 71-3			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**

Test value form of element migration from 'Wooden toys'

Results according to **EN 71-3: 2019-**Migration of certain elements

Elements	Category Result (mg/kg) Wooden toys (mix)
Aluminium	BL
Antimony)	BL
Arsenic	BL
Barium (Ba)	BL
Boron	BL
Cadmium	BL
Chromium(III)	BL
Chromium(VI)	BL
Cobalt	BL
Copper	BL
Lead	BL
Manganese	BL
Mercury	BL
Nickel	BL
Selenium	BL
Strontium	BL
Tin	BL
Organic tin	BL
Zinc	BL

NOTE:

(Results shown are of the total weight on samples)

BL= Below Limit

N.A.= Not Applicable

-mg/kg = Milligram per Kilogram Based On Dry Weight of Sample

EN 71-3			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**

Toy material categories

Elements	Limit (mg/kg)		
	Category I	Category II	Category III
	Dry, brittle, powder-like or pliable toy material	Liquid or sticky toy material	Scraped-off toy material
Aluminium	5625	1406	70000
Antimony	45	11.3	560
Arsenic	3.8	0.9	47
Barium	1500	375	18750
Boron	1200	300	15000
Cadmium(Cd)	1.3	0.3	17
Chromium(III)	37.5	9.4	460
Chromium(VI)	0.02	0.005	0.053
Cobalt	10.5	2.6	130
Copper	622.5	156	7700
Lead	13.5	3.4	160
Manganese	1200	300	15000
Mercury	7.5	1.9	94
Nickel	75	18.8	930
Selenium	37.5	9.4	460
Strontium (Sr)	4500	1125	56000
Tin	15000	3750	180000
Organic tin	0.9	0.2	12
Zinc	3750	938	46000

Appendix 1

Photo view of Wooden toys

Photo 1 View: CSDW-005