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उत्पाद मैनुअल

खिलौनों की सुरक्षा भाग 1 यांत्रिक और भौतिक गुणधर्म से संबंधित सुरक्षा पहलु — विशिष्ट

IS 9873 (Part 1,2,3,4,7,9,10,11 and IS 15644) के अनुसार

PRODUCT MANUAL

for Safety of Toys Part 1 Safety Aspects Related to Mechanical and Physical Properties - Specification
ACCORDING to IS 9873 (Part 1,2,3,4,7,9,10,11 and IS 15644)

विभिन्न उत्पादों के लिए भारतीय मानक ब्यूरो) अनुरूपता मूल्यांकन (विनियम, 2018 की योजना -I के तहत प्रमाणन के संचालन में एकरूपता और पारदर्शिता के लिए इस उत्पाद मैनुअल का उपयोग सभी क्षेत्रीय / शाखा कार्यालयों और लाइसेंसधारियों द्वारा संदर्भ सामग्री के रूप में किया जाएगा। दस्तावेज़ का उपयोग बीआईएस प्रमाणन प्राप्त करने के इच्छुक संभावित आवेदकों द्वारा भी किया जा सकता है।

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure uniformity of practice and transparency in operation of certification under Scheme-I of Bureau of Indian Standards (Conformity Assessment) Regulations, 2018 for various products. The document may also be used by prospective applicants desirous of obtaining BIS certification.

1.	मानक संख्या IS No.	:	IS 9873 (Part 1,2,3,4,7,9,10,11 and IS 15644)
	शीर्षक Title	:	i. Safety of Toys Part 1 Safety Aspects Related to Mechanical and Physical Properties ii. Safety of Toys Part 2 Flammability iii. Safety of Toys Part 3 Migration of Certain Elements iv. Safety of Toys Part 4 Swings, Slides and Similar Activity Toys for Indoor and Outdoor Family Domestic Use v. Safety of Toys Part 7 Requirements and Test Methods for Finger Paints vi. Safety of Toys Part 9 Certain Phthalates Esters in Toys and Children's Products vii. Safety of Toys Part 10 Experimental Sets for Chemistry and Related Activities viii. Safety of Toys Part 11 Chemical Toys (Sets) other than Experimental Sets ix. Safety of Electric Toys
	संशोधनों की संख्या No. of amendments	:	i. IS 9873 (Part 1): 2025, Amd- NIL ii. IS 9873 (Part 2): 2025, Amd- NIL iii. IS 9873 (Part 3): 2020, Amd- 01 iv. IS 9873 (Part 4): 2017, Amd- 01 v. IS 9873 (Part 7): 2017, Amd- 01 vi. IS 9873 (Part 9):2017, Amd- NIL vii. IS 9873 (Part 10):2024, Amd- NIL viii. IS 9873 (Part 11):2024, Amd- NIL ix. IS 15644: 2006, Amd- 01
2.	नमूना दिशानिर्देश Sampling Guidelines		

a)	कच्चा माल Raw material	: All materials shall be visually clean and free from infestation. : The materials shall be assessed visually by normal corrected vision rather than under magnification. (Cl4.3 of IS 9873 (Part 1): 2025)
b)	समूहीकरण दिशानिर्देश Grouping Guidelines	: Please refer ANNEX – A
c)	नमूने का परिमाण Sample Quantity	: 03-10 pieces. However, depending on the size of toys, the certification officer shall consult with the lab and ensure that sufficient quantity required for complete testing is sent to lab. (Samples to be fully packaged and labeled)
d)	परीक्षण अनुरोध में घोषित किए जाने वाले पैरामीटर Parameters to be Declared in Test Request	Name of the product Type Description of toy Category No. and Name Sub- category No. and Name Input source for electric toy Starting Age Series No. Applicable primary standard Applicable Secondary standard Note: Apart from the above, any other requirements/parameters may also be declared as per the standard, as applicable.
3.	परीक्षण उपकरणों की सूची List of Test Equipment	: Please refer to Annex-B
4.	निरीक्षण और परीक्षण की स्कीम Scheme of Inspection and Testing	: Please refer to Annex-C
5.	एक दिन में संभावित परीक्षण Possible tests in a day	
		All possible applicable tests as per IS 9873 (Part 1) and IS 15644
6.	लाइसेंस का दायरा /Scope of the Licence:	
	“Licence is granted to use Standard Mark as per IS 9873 (Part 1): 2025/IS 15644:2006 with the followingscope: *	
	Name of the product	Safety of Toys Part 1 Safety Aspects Related to Mechanical and Physical Properties/Safety of Electric Toys
	Type	Non Electric Toys/Electric Toys
	Description of toy	Rattle, Ring etc., (as applicable)
	Category No. and Name	Category A- Toys for sensorimotor or activities — First age
	Sub- category No. and Name	Subcategory 1 - Rattles and rings
	Input source ** (Only for electric toys)	NA
	Starting Age	0 months +
	Series No.#	S01
	Applicable primary standard	IS 9873 Part 1

Applicable standard	Secondary	IS 9873 Part 2, 3 , 4, 9 ,10 and 11
*Details in the table are given for illustration. Also see sampling guidelines at Annex-A **Input source for electric toys - battery operated, transformer operated or dual supply #Details of models contained in each series shall be declared by manufacturer to BIS separately and BIS shall endorse the series wise details of models separately in the licence document as Annexure (See Annex-A for details)		

BUREAU OF INDIAN STANDARDS
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ANNEX-A

GROUPING GUIDELINES

1. For the purpose of certification, toys have been classified into 2 types. For each type, one primary standard shall apply against which licence would be granted and the other standards against which testing may also be required to be done shall be taken as secondary standards. However, testing will be considered by the lab based on both the primary and secondary standards applicable. The classification is as follows:

Sl. No.	Type	Primary Standard Applicable	Secondary Standards (As Applicable)
1	Non Electric Toys	IS 9873 Part 1	IS 9873 Parts 2, 3,4, 7 9,10 and 11
2	Electric Toys	IS 15644	IS 9873 Parts 1, 2, 3,4, 7 9, 10 and 11

2. Further, based on their specific purpose and function, toys have also been classified into 7 Categories and 146 sub-categories as per APPENDIX I (based on IS 9873 (Part8):2019).
3. For the purpose of certification, all varieties of toys of similar design₁, made from the same materials₂ and covered under a single sub-category, shall be considered as a series (group of varieties).
4. Accordingly, the following sampling or grouping guidelines shall be followed for drawal and testing of samples for consideration of Grant of Licence (GOL) and Change in Scope of Licence(CSoL):

Sl. No.	Type	Samples to be drawn and tested for GOL/CSoL
1	Non Electric Toys	Sample (of required quantity) of any one model of toy from among all the models in the same series i.e. of same type, similar design₁, made from the same materials₂ and covered under a single sub- category to be drawn and tested for considering GOL or CSOL.
2	Electric Toys	Electric toys are further sub-divided into the following sub-groups according to input source: • Battery operated • Transformer toys • Dual-supply toys Accordingly, the following shall apply: — To cover all the models of battery operated electric toys, one model of battery operated electric toy from among all models of battery operated electric toys having the same power supply layout, same chassis, same power requirement and same battery type &size, processor/ controller (if any), same charger for externally rechargeable batteries (Alternate models of charger may be evaluated as part of the main product and mentioned in the test report),and in the same series (as per Sl No 1) to be drawn and tested for considering GOL or CSOL. — To cover all the models of Transformer toys, one model of transformer toy from among all models of Transformer toys having the Same mains layout or

		SMPS board, Same enclosure (except for differences of decorative parts which do not affect the electrical safety), Same processor/ controller and in the same <u>series (as per SI No 1)</u> to be drawn and tested for considering GOL or CSOL. To cover all the models of Dual-supply toys, one model of dual supply toy from among all models of Dual-supply toys having Same mains layout or SMPS board, Same enclosure (except for differences of decorative parts which do not affect the electrical safety), Same chassis, Same battery type & size(Alternate models of batteries may be evaluated as part of the main product and mentioned in the test report), Same processor/ controller and in the same <u>series (as per SI No 1)</u> to be drawn and tested for considering GOL or CSOL
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Footnotes:

- I. Similar Design pertains to models which have similar designs in terms of compliance to the safety requirements specified in the relevant Indian Standards. For electric toys, input source, mains layout etc as given in the table above will also constitute design parameters.
- II. Same materials pertain to material of the same nature (i.e. LLDPE or PVC or HDPE or Cotton Fabric etc.).

5. **APPLICATION FOR GRANT OF LICENCE**

For manufacturers applying for grant of licence, a declaration/request as per format at **APPENDIX II** shall be submitted to BIS by the manufacturer through Manakonline, based on which the application shall be assessed and the scope of licence shall be defined by BIS.

6. **APPLICATION FOR CHANGE IN SCOPE OF LICENCE**

For manufacturers applying for change in scope of licence i.e. addition of a new series in the scope of their licence, a declaration/request as per format at APPENDIX III shall be submitted to BIS by the manufacturer through Manakonline, based on which the application shall be assessed and the scope of licence shall be revised by BIS

7. **APPLICATION FOR ADDITION OF NEW MODELS IN THE SERIES ALREADY COVERED IN THE SCOPE OF LICENCE**

Whenever a licensee intends to add new model(s) to a series already covered in the scope of licence, the declaration/request shall be submitted by the manufacturer as per APPENDIX IV through Manakonline and the information shall be noted by BIS and these additional models endorsed in the licence document by revising the Annexure to the licence document containing the series wise list of models. After submission of the information to BIS Branch Office through Manakonline, the licensee may use the standard mark on toys with respect to such models without waiting for BIS to endorse the models in the licence. (Licensee shall be able to produce documentary proof of having submitted this information to BIS).

However, in case any discrepancy is observed post-facto due to which it is viewed that the models are not to be endorsed in the scope (e.g. if the models do not belong to the series as declared), Head of BIS Branch Office concerned, may, after giving the licensee an opportunity to explain, direct the licensee to cease marking on the toys of the relevant models, or in case the toys are already marked and dispatched, issue directions for product recall.

8. However, if any variety of toy pertains to a category/sub-category which is not covered in the 7 Categories and 146 sub-categories as per Annex I, the manufacturer shall declare the same. **In case of such varieties, the above sampling guidelines shall not apply and each such variety shall be required to be got tested from third party lab for covering them in the scope of licence.**
9. With respect to the "Starting Age" mentioned in the grouping (Appendix-I), in case a manufacturer intends to declare a starting age higher than that specified in Appendix-I, it shall be ensured that the age grading so declared is reasonable and in accordance with the age grading guidelines given in IS 9873 (Part 8) to ensure that a toy is appropriate and safe at the various stages of physical and mental development of the child using the toy.

In case a manufacturer is found to be declaring a higher age grading than that specified in Appendix-I simply in order to avoid testing of certain requirements, such requests shall not be entertained.

For example, starting age for teethingers and teething rings is given as 4 months+ in Appendix-I. Further, the test for shape, size and strength (C. 5.3 of IS 9873 (Part 1): 2025) of Squeeze toys, rattles, and certain other toys and components of toys (Cl. 4.5.1.2 of IS 9873 (Part 1): 2025) is applicable only for teethingers and teething toys intended for children under 18 months.

In case any manufacturer declares a higher starting age for teethingers or teething toys, say, 18 months+ (to avoid the tests prescribed in the standard which are not applicable if the toy is age graded 18 months +.), such requests shall not be agreed as the age grading would not be reasonable.

However, scope of licence should clearly mention the starting age applicable.

10. Since Electrical Toys are essentially Non-Electrical Toys with additional electrical functionality, the test report for Electrical Toys (IS 15644), submitted by the firm, may also be considered for Non-Electrical Toys (IS 9873 (Part 1)), provided that the test report covers all the requirements specified in both the Indian Standards. A declaration shall be obtained from the manufacturer confirming that both categories of toys (Electrical and Non-Electrical) are identical in all respects, except for the electrical functionality, and comply with all the test requirements specified in the relevant Indian Standards.
11. Scope of licence shall be restricted based on the manufacturing and testing facilities available.
12. During the operation of the Licence, BO shall ensure that all the varieties covered in the Licence are tested in rotation and samples of toys of different colours are tested in rotation, to the extent possible.

ANNEX- B

LIST OF TEST EQUIPMENTS

(INDICATIVE LIST, FOR GUIDANCE ONLY)

Sl. No.	Tests used in with Clause Reference			Test Equipment
	Test	Clause	IS	
1.	Small parts test	5.2	IS 9873 (Part 1):2025	Cylinder as shown in Figure 26
2.	Test for shape and size of certain toys	5.3	-do-	Test template A shown in Figure 27, Supplemental test template B shown in Figure 28
3	Small balls test	5.4	-do-	Test template C shown in Figure 29
4.	Test for pompoms	5.5	-do-	test template C shown in Figure 29
5.	Test for pre-school play figures	5.6	-do-	Supplemental test template B shown in Figure 28
6.	Accessibility of a part or component	5.7	-do-	Articulated accessibility probe,
7.	Sharp-edge test	5.8	-do-	Sharp-edge test as per Figure 31, Steel Mandrel, Device for rotating the mandrel and applying a force to it, Pressure- sensitive polytetrafluoroethylene (PTFE) tape
8.	Sharp-point test	5.9	-do-	Point tester, Figure 32
9.	Determination of thickness of plastic film and sheeting	5.10	-do-	As Per ISO 4593 A measuring device capable of measuring thickness to an accuracy of 1 µm,
10	Test for cords	5.11	-do-	Suitable apparatus capable of applying and measuring tensile forces up to (25 ±2) N, instruments to measure length and cross sectional area of cords e.g. an optical projector, head probe (see Figure 35), hook test fixture (Figure 36), mass of (1 ± 0,1) kg, conditioning chamber to maintain samples at a temperature of (25± 3) °C and at a relative humidity of 50 % to 65%.
11	Stability and overload tests	5.12	-do-	smooth surfaces inclined 10+0.5°/-0.0° and 15+0.5°/-0.0°, 10±1° to the horizontal plane, Loads for stability test (25 ± 0,2,50 ± 0,5 kg), Loads for overload test (35 ± 0,3, 80 ± 1,0, 140 ± 2,0)

12	Test for closures and toy chest lids	5.13	-do-	Suitable apparatus capable of applying and measuring tensile forces up to $(45 \pm 1,3)$ N in an outward direction to the inside of the closure perpendicular to the plane of the closure Durability test apparatus to subject the lid to 7000 opening-and-closing cycles, where one cycle consists of raising the lid from its fully closed to its fully open position and returning it to fully closed. The time to complete one cycle shall be approximately 15 s. The 7 000 cycles shall be completed within a time period of 72 h.
13	Impact test for toys that cover the face	5.14	-do-	Suitable apparatus to drop a steel ball with a diameter of $(16 \pm 0,15)$ mm and mass of $(16,9 \pm 0,7)$ g from a height of $(130 \pm 0,5)$ cm onto the horizontal upper surface of the toy in the area that would cover the eyes in normal use.
14	Kinetic energy and wall impact test	5.15	-do-	Timing device for determining the velocity, to give a calculated kinetic energy to an accuracy of 0,005 J.
15	Free-wheeling facility and brake performance test	5.16	-do-	Apparatus for Stability and overload tests, surface covered with aluminum oxide paper P60, Apparatus to Pull the toy at a constant speed of $(2 \pm 0,2)$ m/s and apply and measure forces of (50 ± 2) N to the pedal in the operating direction producing the effect of the brake, mass of $(50 \pm 0,5)$ kg
16	Determination of speed of electrically driven ride-on toys	5.17	-do-	mass of $(25 \pm 0,2)$ kg, horizontal surface, Apparatus to check if velocity exceeds 8 km/h.
17	Determination of temperature increases	5.18	-do-	ambient draft-free atmosphere with a temperature of (21 ± 5) °C, Thermometer/appropriate equipment to Measure the temperature of the accessible parts
18	Leakage of liquid-filled toys	5.19	-do-	Conditioning chamber to condition toy at a temperature of (37 ± 1) °C, Apparatus to apply a force of 5 N to the external surface of the toy through a steel needle with a diameter of $(1 \pm 0,1)$ mm and with a tip radius of $(0,5 \pm 0,05)$ mm
19	Durability of mouth-actuated toys	5.20	-do-	Durability test apparatus comprising piston pump capable of discharging and receiving more than 300 cm ³ of air in less than 3 s to the mouthpiece of the mouth-actuated toy with a relief valve so arranged that the pump will not generate a positive or negative pressure of more than 13,8 kPa.

20	Expanding materials	5.21	-do-	Conditioning chamber to condition the toy or component at (21 ± 5) °C and at a relative humidity of 40 % to 65 %, calipers, demineralized water, container of requisite dimensions, tongs
21	Folding or sliding mechanisms	5.22	-do-	Loads of mass $(25 \pm 0,2)$ kg and $(50 \pm 0,5)$ kg, horizontal surface, Apparatus/support frames to apply the loads
22	Washable toys	5.23	-do-	Automatic washing machine, dummy loads, washer, dryer or laundry detergent, Apparatus to measure mass (Weighing scale etc.)
23	Reasonably Foreseeable abuse tests	5.24	-do-	Drop test: impact surface shall consist of vinyl composition tile of approximately 3 mm nominal thickness laid over concrete of at least 64 mm thickness. The tile shall have a hardness of (80 ± 10) Shore A and the impact surface shall be at least 0,3m². Tip-over test for large and bulky toys: Apparatus to Gradually apply a force, which is not to exceed 120 N, in a horizontal direction and 1 500 mm above the horizontal surface or at the top edge of the toy for toys less than 1 500 mm in height. A non-resilient step with a height of (25 ± 2) mm shall be positioned such that it prevents sliding or rolling of the toy during the test. Dynamic strength test for wheeled ride-on toys other than toy scooters: Loads and Drive Torque test: torque gauge or torque wrench to apply torque of $(0,45 \pm 0,02)$ NM Tension and Compression test: Tension and Compression Test Apparatus with loading device equipped with a self- indicating gauge or other appropriate means to measure force applied to accuracy of 1 N Flexure test: Apparatus as per 5.24.8

24	Determination of sound pressure levels	5.25	-do-	Environment that meets the qualification requirements of either ISO 11201 or ISO 11202, Equipment for Noise measurement in dB including instrumentation system, including the microphone and cable as per class 1 instrument as specified in IEC 61672-1, standard test table as described in ISO 11202 (wooden top with a thickness of 4 cm or larger and leg construction providing a stable test surface), hypothetical box-shaped measurement surface (see Figure 43), reflecting plane (for example, concrete, tile or another hard surface) and a test rig for Pull or push toys, test rig for Cap firing toys
25	Static strength for toy scooters	5.26	-do-	Test masses for toy scooters of $(50 \pm 0,5)$ kg, (100 ± 1) kg of dimensions as per Figure 47
26	Dynamic strength for toy scooters	5.27	-do-	Load as specified in Figure 48, equipped with two articulated arms and a removable cushion with straps, platform
27	Brake performance for toy scooters	5.28	-do-	250 mm high platform (with stabilizers) with a total mass of $(4,8 \pm 0,2)$ kg as shown in Figure 49, mass of $(50 \pm 0,5)$ kg, $(25 \pm 0,2)$ kg, Setup to apply and measure force applied up to 20 kg/30 N.
28	Strength of toy scooter steering tubes	5.29	-do-	horizontal plane equipped to secure the toy scooter, mass of $(25 \pm 0,2)$ kg, $(50 \pm 0,5)$ kg, (100 ± 1) kg
29	Resistance to separation of handlebar	5.30	-do-	Setup to apply and measure force applied up to 90 N
30	Tension test for magnets	5.31	-do-	Tension test apparatus with Nickel disc with a minimum nickel content of 99 %, a diameter of $(30 \pm 0,5)$ mm and thickness of $(10 \pm 0,5)$ mm.
31	Magnetic flux index	5.32	-do-	Magnetic flux index test apparatus with Direct current field Gauss meter, with a resolution of 5 G, capable of determining the field to an accuracy of 1,5 % or better. The meter shall have an axial type probe with an active area diameter of $(0,76 \pm 0,13)$ mm and a distance between the active area and probe tip of $(0,38 \pm 0,13)$ mm, Calliper, or similar device, with an accuracy of 0,1 mm.
32	Impact test for magnets	5.33	-do-	Impact test for magnets apparatus with plane horizontal steel surface and arrangement to drop a metallic weight with a mass of $(1 \pm 0,02)$ kg, distributed over a diameter of (80 ± 2) mm, through a distance of (100 ± 2) mm onto the toy

33	Soaking test for magnets	5.34	-do-	Container of demineralized water maintained at a temperature of $(21 \pm 5) ^\circ\text{C}$ for 4 min
34	Determination of projectile range	5.35	-do-	Apparatus to Discharge the projectile using a discharge angle that will maximize the distance travelled (typically this is 45°). At the point of discharge, the projectile shall be disengaged from the discharge mechanism and in free flight.
35	Tip assessment of rigid projectiles	5.36	-do-	gauge shown in Figure 54
36	Length of suction cup projectiles	5.37	-do-	flat horizontal surface, measuring scale/tape
37	Yo-yoball measurement	5.38	-do-	Setup for Yo-yo ball measurements including fixed clamping device
38	Flammability		IS9873 (Part 2):2025	Test burner as described in ISO 6941:2003 Conditioning and test chamber Fire extinguishers and other protective equipment
39	Migration of Certain Elements		IS 9873 (Part 3) : 2020	Reagents - Hydrochloric acid solution, $c(\text{HCl}) = (0,07 \pm 0,005)\text{mol/l}$. - Hydrochloric acid solution, $c(\text{HCl}) = (0,14 \pm 0,010)\text{mol/l}$. - Hydrochloric acid solution, $c(\text{HCl}) = \text{approximately } 1\text{mol/l}$. - Hydrochloric acid solution, $c(\text{HCl}) = \text{approximately } 2\text{mol/l}$. - Hydrochloric acid solution, $c(\text{HCl}) = \text{approximately } 6\text{mol/l}$. - General purpose reagent <i>n</i>-heptane, (C_7H_{16}); 99%. - Water of at least grade 3 purity, in accordance with ISO3696. Apparatus - Normal laboratory apparatusand - Plain-weave wire-cloth stainless steel metal sieve, of nominal aperture 0,5 mm and tolerances as

				indicated in Table A.1. • Means of measuring pH to an accuracy of $\pm 0,2$ pH units. Cross-contamination shall be prevented. • Membrane filter, of poresize $0,45\mu\text{m}$. • Centrifuge, capable of centrifuging at $(5\ 000 \pm 500)$ • Means of agitating the mixture, at a temperature of $(37 \pm 2)^\circ\text{C}$. • Series of containers, of gross volume between $1,6 \times$ and $5,0 \times$ that of the volume of hydrochloric acid extractant • Analytical Weighing balance Instrumentation Suitable instrument having a detection limit of a maximum of 1/10 of the values to be determined
40	Stability of activity toys with a free height of fall of 600 mm or less	6.1.1	IS9873 (Part 4):2017	— Loads of mass $(50 \pm 0,5)$ kg and dimensions as given in Figure 19. — Loads of mass $(25 \pm 0,2)$ kg and dimensions as given in Figure 19. — Inclined plane of $(10 \pm 1)^\circ$.
41	Stability of activity toys with a free height of fall of more than 600 mm	6.1.2	-do-	— Suitable device(s) to apply a horizontal force of $(120 \pm 5)\text{N}$. — Stops, if needed.
42	Stability of slides	6.1.3	-do-	— Loads of mass (50 ± 2) kg and dimensions as given in Figure 19. — Inclined plane of $(10 \pm 1)^\circ$.
43	Stability of swings and other activity toys with crossbeams more than 1 200 mm above the ground	6.1.4.1	-do-	— Suitable device(s) to apply a horizontal force from 125 N to $(2\ 000 \pm 20)$ N according to Table 4. — Stops, if needed.
44	Stability of swings and other activity toys with crossbeams 1 200 mm or less above the ground	6.1.4.2	-do-	— Loads of mass $(25 \pm 0,2)$ kg and dimensions as given in Figure 19. — Blocks, if needed.

45	Stability of toddler swings	6.1.5	-do-	Pendulum test apparatus constructed in accordance with dimensions and materials specified in Figure 21.
46	Strength of toys other than swings	6.2.1	-do-	– Load(s) of mass ($50 \pm 0,5$) kg and dimensions as given in Figure 19. – Load(s) of mass ($25 \pm 0,2$) kg and dimensions as given in Figure 19.
47	Strength of swings and similar toys	6.2.2	-do-	a) For swings, except those covered by b): – a load with a mass of (200 ± 10)kg; – loads with a mass of (50 ± 2)kg. b) For swings intended for children under 36 months and with suspension points 1 200 mm or less above the base level: – a load with a mass of (66 ± 3) kg.
48	Dynamic strength of barriers and handrails	6.3	-do-	— A pad with a length of 200 mm and a height of 50 mm minimum made of textile, leather or similar material and stuffed with suitable material and with a shape that will enable it to be attached to the top of a barrier or handrail. — A device consisting of a pulley and a (25 ± 1) kg mass attached to one end of a non-elastic cord, that will enable a horizontal impact to be applied to the pad on the barrier or handrail by means of a freefalling mass.
49	Determination of impact from swing elements	6.4	-do-	— Test mass, consisting of an aluminium sphere or semi-sphere of radius $80 \text{ mm} \pm 3 \text{ mm}$, and a total mass (including accelerometer) of ($4,6 \pm 0,05$) kg. The impacting part between the surface struck and the accelerometer shall be homogeneous and free from voids. Cables connected to the accelerometer shall be placed in such a way that the effect on the mass of the test mass is minimized. An example is given in Figure 24. — Accelerometer, mounted at the centre of gravity of the test mass assembly with the sensitivity axis aligned to within 2° of the direction of travel of the test mass, capable of measuring acceleration triaxially in the range of $\pm 500 \text{ g}$ with an accuracy of $\pm 0,1 \text{ g}$ and with a frequency range from 0 Hz to 10 000Hz. — Amplifier with a sampling frequency of 10 kHz and a cut-off frequency of 10kHz. — Two chains where the chain links have a thickness of material (diameter) of ($6 \pm 0,5$) mm and an outer major dimension of (47 ± 2) mm. The chains shall be of equal length suspended from pivots 600mm apart at the same height as the suspension connectors, such that they meet at the

				point of connection to the test mass. The fictive prolongations of the chains shall meet in the centre of the test mass (see Figure 24).
50	Test for head and neck entrapment -	6.5	-do-	Test probes made of any suitably rigid material and with dimensions as given in Figures 25, 26 and 27. (Head and neck entrapment in completely bound openings) Test template made of any suitable rigid material and with dimensions as given in Figure 28 (Head and neck entrapment in partially bound and V-shaped openings)
51	Toggle test	6.6	-do-	Toggle test device as shown in Figure 31 a) comprising of: — toggle, as shown in Figure 31 b), made of polyamides (PA) (e.g. nylon) or polytetrafluoroethylene (PTFE), which have been found to be suitable materials; — chain, as shown in Figure 31c); — collar, detachable and with goodslip; — pole.
52	Test for protrusions	6.7	-do-	Test gauges made of any suitable rigid material and with dimensions as given in Figure 34. 50 (All Protrusions) A test gauge made of any suitable rigid material and with dimensions as given in Figure 36. (Protrusions in motion rides)
53	Durability test for suspension connectors and means of suspension	6.8	-do-	Test masses as specified in Table 5
54	Deflation of inflatable activity toys	6.9	-do-	Loading pad, made of a rigid material with a diameter of 400 mm. Additional loads, consisting of sandbags sufficient to make up the test loads as specified in Table 6.
55	Static load test for paddling pools with non-inflatable walls	6.10	-do-	25 kg load
56	Test Methods For Finger Paints - Limits for primary aromatic amines	4.5.1	IS 9873 (Part 7) : 2017	Reagents: • Methanol., Acetonitrile, <i>tert</i>-Butyl methyl ether, Citrate/sodium hydroxide buffer, Sodium dithionite solution, Porous, granular —kieselguhrll SPE column, Anhydrous sodium sulfate, Certified amine standards

				- Internal standards for gas chromatography: IS 1: 2,4,5-Trichloroaniline, CAS No. 636-30-6., IS 2: 4-Amino-2-methylquinoline, CAS No. 6628-04-2., IS 3: Tributylphosphate, CAS No. 126-73-8; - Standard solutions: Stock solution of aromatic amines, - Calibration solutions, Internal standard solution, Recovery solution of aromatic amines Apparatus - Reaction vessel (50 ml conical flask) of temperature-resistant glass with tight-fitting cap. - Water bath, capable of maintaining a temperature of $(37 \pm 2) ^\circ\text{C}$ and $(70 \pm 2) ^\circ\text{C}$. - Column made from glass or polypropylene, 25 mm to 30 mm internal diameter, 140 mm to 150 mm length, filled with about 20g porous, granular—kieselguhrll SPE material, fitted on the outlet with a glass fibre filter (or commercial SPE column)³. - Vacuum rotary evaporator or equivalent low temperature sample concentration system. - Pipettes 10 ml, 5 ml, 2 ml, 1ml. Instrumentation (The analysis shall be performed using equipment selected from the following list) - HPLC with gradient-elution and AD. - GC with MS.
57	Test Methods For Finger Paints - Limits for other impurities	4.5.2	-do-	Standards, reagents and solvents - Hexane, analytical grade. - Cyclohexane, analytical grade. - Acetone, analytical grade. - trimethylpentane, analytical grade. - Toluene, analytical grade. - Cyclohexane (E.2.2): acetone (E.2.3) 1:1 v/v mixture. - Toluene (E.2.5): acetone (E.2.3) 2:1 v/v mixture. - Anhydrous sodium sulfate. - Hexa chloro benzene (HCB), CAS No

				118-74-1, > 99 %. - Commercial PCB standard mixture or individual PCB congeners – PCB congener 11 (3,3'-Dichlorobiphenyl), CAS No: 2050-67-1; – PCB congener 28 (2,4,4'-Trichlorobiphenyl), CAS No: 7012-37-5; – PCB congener 52 (2,2',5,5'-Tetrachlorobiphenyl), CAS No: 35693-99-3; – PCB congener 101 (2,2',4,5,5'-Pentachlorobiphenyl), CAS No: 37680-73-2; – PCB congener 118 (2,3',4,4',5-Pentachlorobiphenyl), CAS No: 31508-00-6; – PCB congener 138 (2,2',3,4,4',5'-Hexachlorobiphenyl), CAS No: 35065-28-2; – PCB congener 153 (2,2',4,4',5,5'-Hexachlorobiphenyl), CAS No: 35065-27-1; – PCB congener 180 (2,2',3,4,4',5,5'-Heptachlorobiphenyl), CAS No: 35065-29-3; – PCB congener 209 (Decachlorobiphenyl), CAS No: 2051-24-3, - Benzo[α]pyrene (B[α]P), CAS No: 50-32-8, > 99 %. - Internal standards. ○ HCB 13C6, CAS No: 118-74-1. ○ PCB congener 101 13C12, CAS No: 37680-73-2. ○ PCB congener 138 13C12, CAS No: 35065-28-2. ○ B [α]P d12, CAS No: 63466-71-7. - Primary standard solutions. - Calibration standards. Apparatus - Amber coloured glass bottle approximately 40 ml volume with tight-fitting screw cap. - Analytical balance, capable of weighing to 4 decimal places. - Glass micro fibre thimble, 33mm diameter x 100 mm. - Soxhlet extractor with siphon cup to hold a 33 mm diameter x 100 mm thimble. - Water cooled condenser.
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				• 250 ml round bottom flask. • Spark proof heating mantle. • Sample concentration system with nitrogen gas stream. • Solid phase extraction column made from either glass or polypropylene, 25 mm to 30mm • internal diameter, 140 mm to 150 mm length, filled with about 20 g porous, granular—kieselguhrll SPE material(or commercial SPE column). Instrumentation • A gas chromatograph-mass spectrometric system • Analytical capillary column
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58	Determination Of Certain Phthalate Esters		IS9873 (Part 9):2017	Reagents • Dichloromethane, CAS No. 75-09- 2, analytical grade or higher, free of phthalate esters. • Phthalate reference substances, DBP, BBP, DEHP, DNOP, DINP, and DIDP (see Annex A), minimum of 95 % purity. • Stock solution, 100 mg/l of DBP, BBP, DEHP, DNOP each, and 500 mg/l of DINP, DIDP each in dichloromethane • External Standard (ES) calibration solutions. • Internal Standard (IS) calibration solutions. Apparatus • Normal laboratory glassware. • Gas chromatography-mass spectrometer (GC-MS), with a capillary column coupled to a mass • Spectrometric detector (electron ionization, EI) used for the analysis. See 7.4.1. • Soxhlet extractor, see Figure B.1. • Solvent extractor, see Figure B.2. • Extraction thimble, cellulose. • Cotton wool, for extraction thimble. • Analytical balance, capable of measuring to an accuracy of 0,001 g. • Concentration apparatus, for example, a rotary evaporator. • Solid phase extraction (SPE) cartridge, 1000 mg silica gel/6 ml tubes, or equivalent. • Volumetric flasks, of 5 ml, 10 ml, 25 ml, 50 ml, and 100 ml nominal capacity. • Pipettes, of 0,5 ml, 1 ml, 2 ml, 5 ml, and 10 ml nominal capacity. • Polytetrafluoroethylene (PTFE) membrane filter, of pore size 0,45 µm
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59	Tests for Safety of Electric Toys - Heating and abnormal operation test	9	IS 15644:2006	• Test corner consisting of two walls at right angles and a floor made of dull black-painted plywood having a thickness of approximately 20mm. • 4 layers of Bleached cotton gauze having dimensions of 500mm x 500 mm and a specific mass of $40 \text{ g/m}^2 \pm 8 \text{ g/m}^2$. • Fine-wire thermocouples and temperature recorder for determination of rise of temperature • <i>Straight steel pin of length 25mm min having a diameter of 0,5 mm, or rod of length 100 mm min having a diameter of 1.0mm</i> • <i>Power supply</i> • Apparatus for needle flame test (Annex B) • <i>Apparatus for low power circuit determination</i>
60	Electric strength at operating temperature	10	-do-	• <i>Power supply</i> • <i>Voltmeter, ammeter, oscilloscope</i>
61	Moisture resistance	11	-do-	• Test apparatus as per 14.2.4 of IS/IEC 60529 • Humidity cabinet capable of maintaining relative humidity of $(93 \pm 3) \%$.
62	Electric strength at room temperature	12	-do-	• <i>Power supply</i> • <i>Voltmeter, ammeter, oscilloscope</i>
63	Mechanical strength	13	-do-	• <i>Impact Hammer test apparatus as per test Ehb of IS 9000 (Pt 7/ Sec 7)/ IEC 60068-2-75.</i>
64	Construction	14	-do-	• <i>Power supply</i> • <i>Voltmeter</i> • <i>Steel surface, cylindrical metallic 1 kg mass of dia 80mm</i> • <i>Pull force gauge up to 90N</i>
				• <i>Calipers, measuring scale/tape</i>
65	Protection of cords and wires	15	-do-	• <i>Calipers, measuring scale/tape</i>
66	Components	16	-do-	• <i>Based on TC/Certification</i>
67	Screws and connections	17	-do-	• <i>Tools such as spanners, wrenches and pliers, torque gauge</i>
68	Clearances and creepage distances	18	-do-	• <i>Calipers, gauges, measuring scale/tape</i>

69	Resistance to heat and fire	19	-do-	• Apparatus for ball pressure test of IS/IEC60695-10-2. • Apparatus for glow-wire test of IS/IEC60695-2-11, • Apparatus for needle flame test (Annex B)
70	Radiation, toxicity and similar hazards	20	-do-	• As per IS 9873 (Part3)
71	Power Input	8	-do-	• Voltmeter, Wattmeter
72	Marking	7	-do-	• Petroleum spirit, water
73	Borosilicate glass	5.2.6	IS 9873 (Part 10)	– 25- ml pycnometer – Water bath – Deionised water – Analytical balance
74	Determination of plasticisers in oven-hardening polyvinyl chloride (PVC) modelling clay sets	10.2	IS 9873 (Part 11)	– Analytical balance – Spark-proof heating mantle/water bath – Oven – Desiccator chamber – 150-ml or 250-ml glass-stoppered flat-bottomed flask – Soxhlet glass extractor with siphon cup – Soxhlet cellulose thimble – Water-cooled glass condenser – Cotton wool – Glass volumetric flask – General volumetric glassware – Stainless steel scalpel blade – Attenuated total reflectance Fourier transform infrared (ATR-FT-IR) spectrometer – Gas chromatograph with mass spectrometer detector (GC-MS)
75	Determination of the emission of benzene, toluene and xylenes from oven hardening plasticised PVC modelling clay sets and polystyrene granules sets	10.3	-do-	– Gas chromatograph with mass spectrometer detector (GC-MS) – Headspace analysis conditions – Other laboratory equipment – Analytical balance – Refrigerator – Brown glass vials for headspace sampling – Volumetric glass pipettes – Brown glass volumetric flasks – Syringe
76	Determination of styrene content in polystyrene granules	10.4	-do-	– Gas chromatograph – General equipment and glassware used in laboratory – Analytical balance – Centrifuge – Refrigerator – Glass containers – Volumetric flask and volumetric pipettes
77	Determination of organic solvents	10.5	-do-	– Analytical balance – Headspace vial – Glass volumetric flask – Volumetric flask

				– General volumetric glassware – Variable positive displacement pipettes – Filter paper – Syringe filter – Headspace gas chromatograph with flame ionization detector (HS-GC-FID) – Gas chromatograph with mass spectrometer detector (GC-MS) – Gas chromatograph with flame ionization detector (GC-FID)
78	Determination of total extract	10.6.2	-do-	– Centrifuge – Ultrasonic bath or shaker – Rotary evaporator – Oven – Analytical balance – 50-ml glass-stoppered flat-bottomed flasks – General volumetric glassware – Desiccator chamber – Centrifuge tubes
79	Identification of nitrocellulose	10.6.3	-do-	– Oven – Press – Fourier transform infrared spectrometer (FTIR-spectrometer)
80	Determination of plasticisers	10.6.4	-do-	– Same as given in clause 10.2.3
81	Determination of film-forming agents	10.6.5	-do-	– General volumetric glassware – Analytical balance – Oven, capable of maintaining a temperature of $(65 \pm 2) ^\circ\text{C}$ – Gas chromatography with mass spectrometer detector (GC-MS)

Annex B

SCHEME OF INSPECTION AND TESTING

1. QUALITY ASSURANCE PLAN

1.1 It is expected that during operation of BIS licence, manufacturers will implement a Quality Assurance Plan (QAP) i.e. a plan of regular testing and in-process controls, designed to ensure that the product bearing the Standard Mark conforms to all requirements of the Indian Standard.

1.2 The manufacturers shall define a Quality Assurance Plan (QAP) defining the control unit (i.e. lot/batch etc.), the levels of control (i.e. the frequency and number of samples for conducting the different tests as per the Indian Standard) and declare the arrangement for testing i.e. whether in-house or subcontracting/sharing for each applicable test and submit the same to BIS Branch Office for information. The manufacturer shall comply with the QAP and maintain test records in accordance with para 2.1.

1.3 RECOMMENDED LEVELS OF CONTROL/CONTROL UNIT:

1.3.1 For the guidance of manufacturers, the recommended definition of control unit is : the entire quantity of the toys of the same type and series (See Sampling guidelines at Annex A) produced under similar conditions of manufacture shall constitute a control unit.

1.3.2 For the guidance of manufacturers in preparing the Quality Assurance Plan, recommended levels of control are given in **Table 1**. Manufacturer has the discretion of declaring their own levels of control or accept the levels of control given in this document.

1.3.3 The manufacturer shall ensure inspection and testing as per the Quality Assurance Plan submitted by them on the whole production of the factory which is covered by this plan.

2. ENSURING COMPLIANCE THROUGH TESTING- Manufacturers shall ensure compliance of their products to all the requirements of the Indian Standard for which they may have in-house test facilities. However, there is no obligation to maintain in-house laboratory. Licensee may use alternative arrangements for tests of the production as per the declared QAP. Various alternatives are available for operation of BIS certification as given below and the relevant guidelines for availing such relaxations by the manufacturers, as amended from time to time, are to be referred :

- i) Shared testing resources like common facility,
- ii) Cluster based testing facility,
- iii) Sub-contracting to outside laboratories which may either be:
 - a) BIS recognised/empanelled laboratories, or
 - b) Any accredited laboratory as per ISO/IEC 17025

2.1 TEST RECORDS- The manufacturers shall maintain test records for the tests carried out (either in-house or at a sub-contracted or at shared test facility) to establish conformity of the product to the Standard for operation of licence. For the tests being subcontracted or conducted at a shared test facility, test results issued by the laboratories or test facilities, shall be made available for inspection by BIS.

3. PACKING AND MARKING - The Standard Mark as given in the Schedule of the licence shall be incorporated legibly and indelibly on the toy/packing provided always that the material so marked conforms to each requirement of the specification.

3.1 Packing and Marking shall be done as per the Indian Standard.

3.2 **Additional Marking requirements:** Additionally, the following shall also be marked on product or package or both:

a) "For BIS certification details please visit www.bis.gov.in"

4. REJECTION - The production which conforms to the Indian Standard and covered under the scope of this licence shall be marked with the Standard Mark. Disposal of non-conforming product shall be done in such a way so as to ensure that there is no violation of provisions of BIS Act,2016.

TABLE 1
(Recommended Levels of Control By BIS- For Guidance Only)

PART A:
LEVELS OF CONTROL FOR SAFETY ASPECTS RELATED TOMECHANICAL AND PHYSICALPROPERTIES
AS PER IS 9873 (PART 1): 2025

(1)				(2)		
Test Details				Levels of Control		
Cl.	Requirement	Test Methods Clause Reference		No. of Sample	Frequency	Remarks
4.3.1	Material quality	4.3.1	IS 9873 (Part 1)	One	Each consignment of material	
4.3.2	Expanding materials	5.21	-do-	-do-	-do-	See notes below
4.4	Small parts	5.24, 5.2	IS 9873 (Part1)	one	Each Control Unit	-do-
4.5	Shape, size and strength of certain toys					-do-
4.5.1	Squeeze toys, rattles, fasteners, and certain other toys and components of toys	5.3	IS 9873 (Part1)	one	Each Control Unit	-do-
4.5.2	Small balls	5.4, 5.24	-do-	one	Each Control Unit	-do-
4.5.3	Pompoms	5.24.6.3	-do-	one	Each Control Unit	-do-
4.5.4	Pre-school play figures	5.6	-do-	one	Each Control Unit	-do-
4.5.5	Toy pacifiers	4.5.5	-do-	one	Each Control Unit	-do-
4.5.6	Balloons	4.5.6	-do-	one	Each Control Unit	-do-
4.5.7	Marbles	5.24, 4.5.7	-do-	one	Each Control Unit	-do-

4.5.8	Hemispheric- shaped toys	5.24, 4.5.8	-do-	one	Each Control Unit	-do-
4.6	Edges					
4.6.1	Accessible sharp edges of glass or metal	5.8, 4.6.1	IS 9873 (Part1)	one	Each Control Unit	-do-
4.6.2	Functional sharp edges	4.6.2	-do-	one	Each Control Unit	-do-
4.6.3	Edges on metal toys	5.8, 4.6.2	-do-	one	Each Control Unit	-do-
4.6.4	Edges on moulded toys	4.6.4	-do-	one	Each Control Unit	-do-
4.6.5	Edges on exposed bolts or threaded rods	5.24.7, 5.24, 5.24.5, 5.24.6.1, 4.6.5	-do-	one	Each Control Unit	-do-
4.7	Points					
4.7.1	Accessible sharp points	5.9	IS9873 (Part1)	one	Each Control Unit	-do-
4.7.2	Functional sharp points	4.7.2	-do-	one	Each Control Unit	-do-
4.7.3	Wooden toys	4.7.3	-do-	one	Each Control Unit	-do-
4.8	Projections	4.8	-do-	one	Each Control Unit	-do-
4.9	Metal wires and rods	5.24.8.2, 5.24.8.3, 5.24.6.4, 5.8, 5.9, 4.9	-do-	one	Each Control Unit	-do-
4.10	Plastic film or plastic bags in packaging and in toys	4.10, 5.10	-do-	one	Each Control Unit	-do-

4.11	Cords	5.11.1, 5.11.2, 5.11.3, 5.11.4, 5.11.5, 5.11.6	-do-	one	Each Control Unit	-do-
4.12	Folding mechanisms					
4.12.1	Toy pushchairs, perambulators and similar toys	4.12.1, 5.22.2	IS9873 (Part1)	one	Each Control Unit	-do-
4.12.2	Other toys with folding mechanisms	4.12.2, 5.22.3	-do-	one	Each Control Unit	-do-
4.12.3	Hinge-line clearance	4.12.3	-do-	one	Each Control Unit	-do-
4.13	Holes, clearances and accessibility of mechanisms					
4.13.1	Circular holes in rigid materials	4.13.1	IS9873 (Part 1)	one	Each Control Unit	-d-
4.13.2	Accessible clearances for movable segments	4.13.2	-do-	one	Each Control Unit	-do- (see note (iii) below)
4.13.3	Chains or belts in ride- on toys	4.13.3,5 .7	-do-	one	Each Control Unit	-do-
4.13.4	Other driving mechanisms	4.13.4	-do-	one	Each Control Unit	-do-
4.13.5	Winding keys	4.13.5	-do-	one	Each Control Unit	-do-
4.14	Springs	4.14	-do-	one	Each Control Unit	-do-
4.15	Stability and overload requirements	4.15.1.1 to 4.15.1.3, 5.12.2, 5.12.3,	-do-	one	Each Control Unit	-do-

		5.12.4, 5.12.5, 5.12.6				
4.16	Enclosures					
4.16.1	Ventilation	4.16.1	IS9873 (Part1)	one	Each Control Unit	-do-
4.16.2	Closures	4.16.2, 5.13.1, 5.13.2.1 , 5.13.2.2	-do-	one	Each Control Unit	-do-
4.16.3	Toys that enclose the head	4.16.3	-do-	one	Each Control Unit	-do-
4.17	Simulated protective equipment, such as helmets, hats and goggles	4.17, 5.14	-do-	one	Each Control Unit	-do-
4.18	Projectile toys	4.18.1 to 4.18.4, 5.15.1, 5.15.2, 5.35, 5.36, 5.37	-do-	one	Each Control Unit	-do-
4.19	Rotors and propellers	4.19, 5.35	-do-	one	Each Control Unit	-do-
4.20	Aquatic toys	4.20	-do-	one	Each Control Unit	-do-
4.21	Braking	4.21, 5.16.1, 5.16.2	-do-	one	Each Control Unit	-do-
4.22	Toy bicycles	4.22.1 to 4.22.3	-do-	one	Each Control Unit	-do-
4.23	Speed limitation of electrically driven ride-on toys	4.23, 5.17	-do-	one	Each Control Unit	-do-

4.24	Toys containing a heat source	4.24,5.18	-do-	one	Each Control Unit	-do-
4.25	Liquid-filled toys	4.25, 5.19	-do-	one	Each Control Unit	-do-
4.26	Mouth- actuated toys	4.26, 5.2, 5.24.5, 5.24.6.1, 5.20	-do-	one	Each Control Unit	-do-
4.27	Toy roller skates, toy inline skates and toy skateboards	4.27	-do-	one	Each Control Unit	-do-
4.28	Percussion caps specifically designed for use in toys	4.28	-do-	one	Each Control Unit	-do-
4.29	Acoustic requirements	5.25	-do-	one	Every six months (or whenever there is a change in design of toy)	-do-
4.30	Toy scooters	4.30.1 to 4.30.8, 5.26, 5.27, 5.285.2 9, 5.12.2, 5.30	-do-	one	Each Control Unit	-do-
4.31	Magnets and magnetic components	5.31, 5.32, 5.2, 5.34, 5.24.2 or 5.24.3, 5.24.5, 5.24.6.1, 5.24.6.2 , 5.33, 5.24.7	-do-	one	Each Control Unit	-do-
4.32	Yo-yo balls	5.38.1, 5.38.2	-do-	one	Each Control Unit	-do-
4.33	Straps intended to be worn fully or partially around the neck	5.11.3	-do-	one	Each Control Unit	-do-
4.34	Sledges and toboggans with cords	4.34	-do-	one	Each Control Unit	-do-

	for pulling					
4.35	Jaw entrapment in handles and steering wheels	4.35, 5.39	-do-	one	Each Control Unit	-do-

Notes for IS 9873 (Part 1)

- i. **Normal use:** All toys shall be tested in accordance with the relevant tests in 4.1 (general) to 5.22 (folding or sliding mechanisms) in order to ensure that risks as a result of normal wear and/or deterioration are minimized. Toys labelled as washable shall be subjected to washing in accordance with 5.23 (washable toys). After testing, the toy shall continue to conform to the relevant requirements of Clause 4 (requirements).
- ii. **Reasonably foreseeable abuse:** After normal use tests, toys intended for children under 96 months, unless otherwise stated, shall be tested in accordance with the relevant tests in 5.24 (reasonably foreseeable abuse tests) to ensure that risks as a result of reasonably foreseeable abuse are minimized. After testing, the toy shall continue to conform to the relevant requirements of Clause 4 (requirements).
- iii. **Accessible clearances for movable segments as per Cl. 4.13.2** is applicable only for ride on toys where the potential for crushing of fingers or other appendages exists and not for smaller toys which prima-facie do not present risk of crushing fingers and appendages
- iv. **Expanding Materials as per Cl. 4.3.2 test** applies only to toys made from materials which absorb water and therefore poses a risk of choking of a child swallows the toy or part thereof and it expands in the airway.
- v. In case it is not practically possible to perform Compression test as per Cl 5.24.7 due to the design/size of the toy, it should be concluded that this test is not applicable for such toys.

PART B:
LEVELS OF CONTROL FOR SAFETY ASPECTS RELATED TO FLAMMABILITY AS PER IS 9873 (PART 2):2025

(1)				(2)		
Test Details				Levels of Control		
Cl.	Requirement	Test Methods Clause Reference		No. of Sample	Frequency	Remarks
4.1	General	4.1	IS9873 (Part2)	One sample per series	Once in six months	Sample to be tested also the material supplier changes
4.2 Toys to be worn on the head						
4.2.2	Beards, moustaches, wigs, etc. made from <i>hair, pile, or material that behaves in a similar manner to hair</i> (e.g. free-hanging ribbons, paper, cloth strands, or other flowing elements), which protrude 50 mm or more from the surface of the toy	4.2.2, 5.2	IS9873 (Part2)	One sample per series	Once in six months	Sample to be tested also if the material supplier changes
4.2.3	Beards, moustaches, wigs, etc. made from <i>hair, pile, or material that behaves in a similar manner to hair</i> (e.g.	4.2.3, 5.3	IS9873 (Part2)	-do-	-do-	-do-

	free-hanging ribbons, paper, cloth strands, or other flowing elements), which protrude less than 50 mm and more than 5 mm from the surface of the toy					
4.2.4	Full or partial moulded head masks	4.2.4, 5.3	IS9873 (Part2)	-do-	-do-	-do-
4.2.5	Toys to be worn on the head (except those covered by 4.2.2 and 4.2.3), hoods and headdresses, including upward-protruding items and masks not covered by 4.2.4 which partially or fully cover the head (e.g. fabric and paperboard masks, eye masks, face masks), but excluding those items covered by 4.3	4.2.5, 5.4	IS9873 (Part2)	-do-	-do-	-do-
4.3	Toy disguise costumes and toys intended to be worn by a child in play	4.3, 5.4, 5.5	IS9873 (Part2)	-do-	-do-	-do-
4.4	Toys intended to be entered by a child	4.4, 5.4	IS9873 (Part2)	-do-	-do-	-do-
4.5	Soft-filled toys	4.5, 5.5	IS9873 (Part2)	-do-	-do-	-do-

PART C:
LEVELS OF CONTROL FOR MIGRATION OF CERTAIN ELEMENTS AS PER IS 9873 (PART 3):2020

(1)				(2)		
Test Details				Levels of Control		
Cl.	Requirement	Test Methods Clause Reference		No. of Sample	Frequency	Remarks
4.1	Sb, As, Ba, Cd, Cr, Pb, Hg, Se, B	8,9,10	IS 9873 (Part 3) : 2020 ;	One sample per series	Once in 12 months	1.Sample also to be tested whenever supplier of material changes

PART D:
LEVELS OF CONTROL FOR SAFETY OF SWINGS, SLIDES AND SIMILAR ACTIVITY TOYS FOR INDOOR AND OUTDOOR FAMILY DOMESTIC USE
AS PER IS 9873 (PART 4):2017

(1)				(2)		
Test Details				Levels of Control		
Cl.	Requirement	Test Methods Clause Reference		No. of Sample	Frequency	Remarks
4.1 General						
4.1.1	Static strength	6.2.1	IS9873 (Part4)	One sample per series	Once in six months	Also to be tested whenever supplier of material changes
4.1.2	Maximum height	4.1.2	IS9873 (Part4)	-do-	-do-	-do-
4.1.3	Corners and edges	4.1.3	IS9873 (Part4)	-do-	-do-	-do-
4.1.4	Protruding parts					

4.1.4.1	General	4.1.4.1	IS9873 (Part4)	One sample per series	Once in six months	Also to be tested whenever supplier of material changes
4.1.4.2	All protrusions	4.1.4.2, 6.7.1	IS9873 (Part4)	-do-	-do-	-do-
4.1.4.3	Upright protrusions	4.1.4.3, 6.7.1	IS9873 (Part4)	-do-	-do-	-do-
4.1.4.4	Motion rides	4.1.4.4, 6.7.2	IS9873 (Part4)	-do-	-do-	-do-
4.1.4.5	Slides	4.1.4.5, 6.7.1.2	IS9873 (Part4)	-do-	-do-	-do-
4.1.5	Climbing and swinging ropes, chains and cables	4.1.5	IS9873 (Part4)	-do-	-do-	-do-
4.1.6	Open tubing	4.1.6	IS9873 (Part4)	-do-	-do-	-do-
4.2	Barriers	4.2, 6.5.1, 6.3	IS9873 (Part4)	-do-	-do-	-do-
4.3	Rung ladders, stepladders and stairways	4.3	IS9873 (Part4)	-do-	-do-	-do-
4.4 Entrapment						
4.4.1	Head and neck entrapment	4.4.1, 6.5.1	IS9873 (Part4)	One sample per series	Once in six months	Also to be tested whenever supplier of material changes
4.4.2	Entrapment of clothing and hair	4.4.2, 6.6	IS9873 (Part4)	One sample per series	Once in six months	Also to be tested whenever supplier of material changes
4.4.3	Entrapment of feet	4.4.3	IS9873 (Part4)	-do-	-do-	-do-
4.4.3	Entrapment of fingers	4.4.3	IS9873 (Part4)	-do-	-do-	-do-
4.5 Stability of activity toys other than slides, swings and toys with crossbeams						
4.5.1	General	4.5.1	IS9873 (Part4)			

4.5.2	Stability of activity toys with a free height of fall of 600 mm or less	4.5.2, 6.1.1	IS9873 (Part4)	-do-	-do-	-do-
4.5.3	Stability of activity toys with a free height of fall of more than 600 mm	4.5.3, 6.1.2	IS9873 (Part4)	-do-	-do-	-do-
4.6	Slides	4.5.3, 6.1.2	IS9873 (Part4)	-do-	-do-	-do-
4.6.1	Stability of slides	4.6.1, 6.1.3	IS9873 (Part4)	-do-	-do-	-do-
4.6.2	Retaining sides for slides	4.6.2	IS9873 (Part4)	-do-	-do-	-do-
4.6.3	Starting, sliding and run-out section on slides	4.6.3	IS9873 (Part4)	-do-	-do-	-do-
4.6.4	Roller slides	4.6.1 to 4.6.3, 4.6.4	IS9873 (Part4)	-do-	-do-	-do-
4.7 Swings						
4.7.1	Stability of swings and other activity toys with crossbeams	4.7.1.1 to 4.7.1.3, 6.1.4.1, 6.1.4.2	IS9873 (Part4)	-do-	-do-	-do-
4.7.2	Strength of crossbeams, swing devices, suspension connectors and suspension couplings	6.2.2	IS9873 (Part4)	-do-	-do-	-do-
4.7.3	Swings intended for children under 36 months	4.7.3.1 to 4.7.3.2, 6.2.2.3.2, 6.1.5	IS9873 (Part4)	-do-	-do-	-do-
4.7.4	Impact from swing elements	6.4	IS9873 (Part4)	-do-	-do-	-do-

4.7.5	Minimum clearance between swing elements, and similar equipment and adjacent structures	4.7.5	IS9873 (Part4)	-do-	-do-	-do-
4.7.6	Lateral stability of swing elements	4.7.6	IS9873 (Part4)	-do-	-do-	-do-
4.7.7	Minimum clearance between swing elements and the ground	4.7.7	IS9873 (Part4)	-do-	-do-	-do-
4.7.8	Suspension connectors and means of suspension	4.7.8, 6.8	IS9873 (Part4)	-do-	-do-	-do-
4.8	Seesaws	4.8	IS9873 (Part4)	-do-	-do-	-do-
4.9	Carousels and rocking toys	4.9, 6.1.1, 6.2.1	IS9873 (Part4)	-do-	-do-	-do-
4.10 Inflatable activity toys						
4.10.1	General	4.10.1	IS9873 (Part4)	-do-	-do-	-do-
4.10.2	Anchorage	4.10.2	IS9873 (Part4)	-do-	-do-	-do-
4.10.3	Connection tubes for continuous inflation	4.10.3	IS9873 (Part4)	-do-	-do-	-do-
4.10.4	Containment	4.10.4. 1 to 4.10.4. 4, 6.9	IS9873 (Part4)	-do-	-do-	-do-
4.11	Paddling pools	4.11.1 to 4.11.3, 6.10	IS9873 (Part4)	-do-	-do-	-do-

PART E:
LEVELS OF CONTROL FOR REQUIREMENTS AND TEST METHODS FOR FINGER PAINTS AS PER IS 9873 (PART 7):2017

(1)				(2)		
Test Details				Levels of Control		
Cl.	Requirement	Test Methods Clause Reference		No. of Sample	Frequency	Remarks
4.1	General	4.1	IS9873 (Part7)	One sample per series	Once in 12 months	Also to be tested whenever supplier of material changes
4.2	Colourants	4.1 4.2.1 4.2.2 Table-1 Table-2 Annex- A Annex- B Annex- C	-do-	One	Each consignment of colourant	-do-
4.3	Preservatives	4.3 Annex- A Annex- D	IS9873 (Part7)	One sample per series	Once in 12 months	Also to be tested whenever supplier of material changes
4.4	Migration of certain elements	4.4	IS9873 (Part3)	-do-	-do-	-do-
4.5.1	Limits for Primary Aromatic Amines	4.5.1.1 4.5.1.2 Table-1 Table-2 Annex- A	IS9873 (Part7)	-do-	-do-	-do-

		Annex- B Annex- C				
4.5.2	Limits for other impurities	4.5.2 Table-3 Annex- A Annex- E	-do-	-do-	-do-	-do-
4.6	Taste and Smell	4.6 Table-4 Annex- A	-do-	-do-	-do-	-do-
4.7	pH Value	4.7 Annex- A	IS9873 (Part7) IS 101(Pt.1/ Sec 8)	-do-	-do-	-do-
4.8	Binding agents, extenders, humectants and surfactants	4.8 4.1 Annex- F	IS9873 (Part7)	-do-	-do-	-do-
4.9	N- Nitrosamine s	4.9 Annex- A	IS9873 (Part7) EN 71- 12	-do-	-do-	-do-
4.10	Container	4.10 Annex- A	IS9873 (Part7)	-do-	-do-	-do-
A.11	Labelling Guidelines	Annex- A	-do-	Each Package of finger paint	Each Package of finger paint	

PART F:
LEVELS OF CONTROL FOR CERTAIN PHTHALATES ESTERS IN TOYS AND CHILDREN'S PRODUCTS
AS PER IS 9873 (PART 9):2017

(1)				(2)		
Test Details				Levels of Control		
Cl.	Requirement	Test Methods Clause Reference		No. of Sample	Frequency	Remarks
3	Maximum acceptable levels of phthalates					
i)	Vinyl in toys or childcare articles		IS9873 (Part6)	One sample per series	Once in 12 months	Also to be tested whenever supplier of material changes
ii)	Vinyl in any part of the toy or childcare article that can be placed in mouth of child under 4 years of age		IS9873 (Part6)	-do-	-do-	-do-

PART G:
LEVELS OF CONTROL FOR EXPERIMENTAL SETS FOR CHEMISTRY AND RELATED ACTIVITIES
AS PER IS 9873 (PART 10):2024

(1)				(2)		
Test Details				Levels of Control		
Cl.	Requirement	Test Methods Clause Reference		No. of Sample	Frequency	Remarks
4.1 Chemistry sets						
4.1.1	Inclusion in the chemistry set	4.1.1	IS 9873 (Part 10)	Firm to have adequate in-process controls to check compliance of this parameter as given in the Indian Standard. However, appropriate records shall be maintained by the manufacturer for evidence of conformity		
4.1.2	Inclusion for experiments supplied in the chemistry set)	4.1.2	-do-	--do---		

4.1.3	Requirements for packaging in containers	4.1.3	-do-	--do---		
4.2	Crystal-growing sets	4.2	-do-	--do---		
4.3	Carbon-dioxide-generating experimental sets	4.3	-do-	--do---		
5 Equipment						
5.1	General requirements	5.1	-do-	--do---		
5.2	Containers and glassware	5.2	-do-	--do---		
5.2.1	Test tubes	5.2.1	-do-	--do---		
5.2.1.1	Sets in which test tubes are heated	5.2.1.1	-do-	--do---		
5.2.1.2	Sets in which test tubes are not heated	5.2.1.2	-do-	--do---		
5.2.6	Test method for borosilicate glass	5.2.6	-do-	One sample	each batch of set*	---

* One batch of set is defined as batch of chemical set consisting of similar materials packed under similar conditions.

PART H:
LEVELS OF CONTROL FOR CHEMICAL TOYS (SETS) OTHER THAN EXPERIMENTAL SETS
AS PER IS 9873 (PART 11): 2024

(1)				(2)		
Test Details				Levels of Control		
Cl.	Requirement	Test Methods Clause Reference		No. of Sample	Frequency	Remarks
5.1	Determination of plasticisers in oven-hardening polyvinyl chloride (PVC) modelling clay sets	10.2	-do-	One sample	each batch of set*	---
5.1	Determination of the emission of benzene, toluene and xylenes from ovenhardening plasticised PVC modelling clay sets and polystyrene granules sets	10.3	-do-	One sample	each batch of set*	---
6.1	Determination of styrene content in polystyrene granules	10.4	-do-	One sample	each batch of set*	---
7	Determination of organic solvents	10.5	-do-	One sample	each batch of set*	---
7	Determination of total extract	10.6.2	-do-	One sample	each batch of set*	---
7	Identification of nitrocellulose	10.6.3	-do-	One sample	each batch of set*	---
7	Determination of plasticisers	10.6.4	-do-	One sample	each batch of set*	---
7	Determination of film-forming agents	10.6.5	-do-	One sample	each batch of set*	---

* One batch of set is defined as batch of chemical set consisting of similar materials packed under similar conditions.

PART I:
LEVELS OF CONTROL FOR SAFETY OF ELECTRIC TOYS AS PER IS 15644:2006

(1)				(2)		
Test Details				Levels of Control		
Cl.	Requirement	Test Methods Clause Reference		No. of Sample	Frequency	Remarks
8	Power Input of transformer& dual-supply toys	8	IS 15644	One sample from each series	Once in a day	
9	Heating and abnormal operation	9.1 to 9.8	IS 15644	One model from each series	Once in six months	
10	Electric Strength at operating temperature	10	IS 15644	One model from each series	Once in a month	
11	Moisture resistance	11.2 to 11.2	IS 15644	One sample from each series	Once in six months	
12	Electric strength at room temperature	12	IS 15644	-do-	-do-	
13	Mechanical Strength		IEC 60068-2-75	-do-	-do-	
14	Construction	14.1 to 14.14	IS 15644	-do-	-do-	
15	Protection of cords and wires	15.1 to 15.2	IS 15644	-do-	-do-	
16	Components	16.1 to 16.3	IS 15644	-do-	-do-	Certified components shall be used
17	Screws and Connections	17.1 to 17.2	IS 15644	-do-	-do-	
18	Clearances and creepage distances	181	IS 15644	-do-	-do-	

19	Resistance to heat and fire	19.1 to 19.2	IS 15644	-do-	-do-	
20	Radiation, toxicity and similar hazards		IS 9873 (Part 3)/ISO 8124-3	-do-	-do-	

APPENDIX I

Categories and sub-categories of toys

Category A — 32 Sub-categories — Toys for sensorimotor activities — First age

Sub-category	Starting age	Description and examples of appropriate toys
1.	0 months+	Rattles and rings
2.	4 months +	Teethers and teething rings
3.	0 months +	Mobiles, with or without sound – toys with miscellaneous figures and shapes to be mounted above the crib and intended to be out of the reach of the child
4.	2 months +	Crib gyms and playmats – mats with simple play features or activities; may include overhead structures that may have dangling objects intended for the child to reach, grasp or hit
5.	3 months +	Cradle and playpen toys – balls, characters attached to cribs, strollers or enclosures
6.	4 months +	Activity playboards – boards that are attached to the crib with various play features such as miscellaneous coloured shapes, shatterproof mirrors, spinners that rattle, buttons to push, parts that slide on guides, doors that open
7.	3 months +	Squeeze toys – constructed of soft material, with or without internal rattle or noise feature
8.	4 months +	Bath toys – animals, small boats and floating objects
9.	6 months +	Simple books made of textiles or plastic
10.	2 months +	Simple dolls and animals – soft-stuffed dolls and animals made of fabric or plush with or without clothes and fixed details which cannot be removed
11.	8 months +	Roly-poly toys, bop-punching toys and pop-up action toys – figures and animals that rock in a to-and-fro motion, made of rigid or inflatable plastic, jack in the box, push-down spinning toys
12.	8 months +	Books with thick (chunky) pages
13.	5 months +	Simple blocks, nesting toys, and stacking toys

14.	6 months +	Simple ball and track toys
15.	18 months +	Push-pull and rolling toys with cord or handle
16.	6 months +	Simple push/pull rolling toys (without cord or handle) which make sounds and / or have coloured lights – wheeled animals or vehicles
17.	18 months +	Wheelbarrows and other vehicles to fill up and empty
18.	12 months +	Boxes, tubs, buckets, and containers – to store toys
19.	3 months +	Cloth and similar soft material balls and geometric forms
20.	18 months +	Toys for sand and water – pails, small shovels, moulds to play with sand and water
21.	12 months +	Rocking animals and rocker chairs – size suitable for children to ride and rock
22.	12 months +	Push toys with a long handle that provides stability – corn popper, lawn mower
23.	9 months +	Learn to walk toys (walk behind) – wheeled unit with a solid base and handle to support the child in the early stages of walking
24.	12 months +	Self-standing foot to floor riding toys, trikes, without pedals – wheeled toys, vehicles without pedals that are propelled by the power provided by the child's feet on the ground
25.	8 months +	Soft materials in various shapes for stacking
26.	12 months +	Sliding beads on a fixed loop or shaft – bead maze or frame
27.	12 months +	Shape sorters with miscellaneous shapes and colours – containers and vehicles with holes of different geometrical shapes that only allow parts to pass through the corresponding openings and to fall inside
28.	12 months +	Tool benches, pounding benches – toys simulating carpenter's benches (strictly pounding toys at this age)
29.	12 months +	Mechanically and electrically operated toys – vehicles, dolls, animal characters etc. made of plastic, metal, fabric or plush, with motions powered by spring or battery
30.	4 months +	Balls or cylinders – clear material with visible contents

31.	0 months +	Musical boxes – toys to be mounted on or near a crib with handle or button for adult activation
32.	6 months +	Simple keyboards or hand-held toys with buttons that activate lights and sounds

Category B — 23 Sub-categories — Toys for physical activities

Sub-category	Starting age	Description and examples of appropriate toys
33.	2 years +	Pedal vehicles, kick scooters, walking bicycles, balance bikes – tricycles, wheeled toys, stable vehicles with pedals, small two wheeled bicycles without pedals powered by the child's feet
34.	2 years +	Child sized electrical vehicles – battery powered vehicles to be driven by children
35.	3 years +	Toy bicycles – two-wheeled pedal bicycles with or without training/supporting wheels to provide stability
36.	6 years +	Skates, two-wheeled scooters and in-line roller skates
37.	3 years +	Roller skates (except in-line) – roller skates with wheels not positioned in linear (in-line) direction
38.	5 years +	Flying objects – kites, boomerangs, simple airplanes (with rubber band)
39.	3 years +	Soap bubbles – toys with accessories for blowing soap bubbles
40.	3 years +	Bowling,—boccell-type games, ring toss games —plastic or wooden pin bowling sets, rings for throwing
41.	12 months +	Lightweight balls (plastic)
42.	3 years +	Toy versions of sporting equipment to imitate real sports versions – baseball, basketball, cricket, golf, shuttlecock, tennis, badminton, or beach racquets
43.	4 years +	Simple obstacle and hopscotch-type games
44.	3 years +	Games involving objects thrown at targets
45.	4 years +	Spinning tops without cord
46.	4 years +	Stilt walking (low height), hula hoops, rings to be balanced with a rod
47.	6 years +	Yo-yos and spinning tops with cord
48.	6 years +	Mini golf, cricket, billiards, table football, and other similar games
49.	5 years +	Jump rope

50.	7 years +	Electronic dancing mats – for learning dance steps and for following complex dance routines
51.	3 years +	Activity toys for indoor and outdoor domestic use – toboggans, sleds, swings with open seating, higher slides with more steps, climbers and see-saws
52.	2 years +	Activity toys for indoor or outdoor domestic use – swing with seats that surround the child and short slides with few steps for climbing
53.	3 years +	Aquatic toys – boards, inflatables (animal/character shapes, boats)
54.	2 years +	Wading or paddling pools (with adult supervision)
55.	3 years +	Simple electronic floor mats – for following patterns, making music, learning simple dance routines

Category C — 20 Sub-categories — Toys for intellectual activities

Sub-category	Starting age	Description and examples of appropriate toys
56.	4 years +	Easy puzzles – 20 to 150 interlocking parts
57.	2 years +	Simple puzzles and plain-fitting parts – puzzles with up to 20 large parts that have smooth edges and fit together without interlocking, may have pegs for grasping shapes for fitting parts together on trays
58.	7 years +	Puzzles – 150 to 500 interlocking parts
59.	18 months +	Toy activity panels with fixed parts and turning gears activated by twisting motions or a crank
60.	18 months +	Simple building blocks with overlapping parts that may or may not interlock
61.	2 years +	Simple matching activities – matching activities based on shapes, colours, or pictures
62.	3 years +	Assembly, construction, or building sets – parts with different shapes with diversified fittings and fastenings
63.	2 years +	Building blocks that snap/fit together – large parts with defined pattern for construction/fastening/assembly that may include features or themes
64.	18 months +	Simple mechanical toys – inclined planes to slide objects, toys actuated by paddles, wheels, and other parts, using water and/or sand
65.	7 years +	Toys that involve or demonstrate elementary laws of physics

66.	8 years +	Experimental kits, scientific kits – chemistry sets, human body in detail, organic material kits, crystals, herbariums, microscopes, habitats
67.	4 years +	Question (images) and answer toys and games – picture matching
68.	2 years +	Educational toys – alphabet and simple number learning
69.	3 years +	Observation and reasoning toys and games – memory games, games of chance, board games without strategy
70.	5 years +	Time-learning games – clocks, calendars, and toys for providing notions of hours, days, and months
71.	3 years +	Educational toys – quantity, size, volume, weight, space, and shape notions, learning to tell time
72.	6 years +	Games involving spelling and numbers (usually individual player) – crossword puzzles, word finding, Sudoku
73.	4 years +	Logical and mathematical games – logical sequences, time sequences
74.	6 years +	Games with mathematical operations – including fractions
75.	2 years +	Computers, tablets, and hand-held games – computer devices for play, such as simple questions and answers type or matching games; also may be multi-lingual

Category D — 12 Sub-categories — Toys that reproduce the technical world

Sub-category	Starting age	Description and examples of appropriate toys
76.	5 years +	Functioning walkie-talkies and telephone sets for communication –
77.	4 years +	Audio and audiovisual equipment with real functions – portable media, karaokes, and microphones
78.	5 years +	Home appliances with limited real function – sewing machine, popcorn popper, mixer, blender, ice-cream machine, cotton-candy machine, etc. NOTE: Not all functioning appliances may be appropriate at this age, particularly toys connected to mains electricity or with heating functions.

79.	5 years +	Detailed scale and/or more realistic vehicle replicas – include features such as doors, hood (bonnet) and trunk (boot) that open and close
80.	18 months +	Simple vehicle miniatures, without mechanisms – cars, trains, motorcycles, trucks, aircrafts, boats, and ships, and others
81.	3 years +	Mechanical and electrical vehicles which imitate adult versions (level of detail, proportional) – spring or battery-powered cars, trucks, aircraft, boats
82.	4 years +	Complex remote controlled vehicles with multi-direction and functionality – cars, trucks, boats moved by remote control, radio or infrared command, or other
83.	6 years +	Complex mechanical or electrical powered vehicles and machines – construction equipment, dump trucks, hoists/cranes
84.	6 years +	Tracks for electrical cars, trains and accessories – auto tracks, train tracks, sophisticated circuits, with or without accessories, such as platforms, tunnels, obstacles, scenery, vehicles, etc.
85.	3 years +	Non-powered vehicles and machines which imitate adult versions (level of detail, proportional) – trucks, aircraft, boats, simple and light, constructed from plastic or wood which may or may not travel on tracks
86.	3 years +	Simple transformable toys and objects – toys whose parts can be moved to transform them from one character or object into another
87.	3 years +	Robots with simple movements or controls

Category E — 23 Sub-categories — Toys for the development of feelings and empathy

Sub-category	Starting age	Description and examples of appropriate toys
88.	9 months +	Dolls, imaginary animal characters, with no removable components – dolls representing fictional characters, including animal or human forms
89.	2 years +	Lightweight dressed dolls, and dolls to dress (excluding fashion dolls) – moving eyes, articulated arms and legs, rooted hair similar to real hair, animated activities, such as crying, bodily functions, smiling or talking, with easy to dress clothing and accessories for imitating familiar activities (bottle, blanket, etc.)

90.	3 years +	Functioning strollers, cribs, and furniture for dolls which imitate real versions
91.	2 years +	Toy tableware, pots, and feeding accessories for dolls
92.	2 years +	Simple role playing toys – home appliances sized to the child, stoves, kitchen sets
93.	3 years +	Domestic appliances in a children's size that are more realistic but with- out actual function – stove, sewing machine, pressing iron, blender, mixer, and other toy appliances
94.	2 years +	Audiovisual equipment that imitates real equipment – plastic versions that imitate radios, CD players, portable media players, telephones, cell phones, karaoke, and microphones which may have limited functions
95.	2 years +	Miniatures of simple characters – Animals, small soldiers, characters made of plastic such as zoo park, super-heroes, fantasy/fictional characters, and historical themes
96.	3 years +	Articulated figures with limited accessories – poseable characters with articulated limbs, moving head and simple mechanisms to simulate heroes, warriors, fictional or imaginative stories and battles
97.	12 months +	Imitation dashboard panels – controls imitating driving activities of cars, boats, airplanes or spaceships
98.	12 months +	Simple costumes and disguises – slip-on costumes without fasteners and with large openings for arms and legs; basic dress-up materials including hats, headscarves or other hair accessories and shoes
99.	2 years +	Costumes, dress up clothing and accessories imitating characters of leg-ends and tales —costumes sized to children with accessories such as masks, helmets, swords
100.	3 years +	Objects imitating home and professional activities – housekeeping objects, carpenter and mechanic tools, physician and nurse instruments, police, firefighter and soldier objects such as helmets, tools, weapons and related accessories
101.	3 years +	Beauty care accessories for dolls – cosmetics, garments, clothing accessories, high-heeled shoes, and small bags

102.	3 years +	Soft or rigid playhouse toys with accessories sized to the children – sales stands, post office
103.	2 years +	Soft and rigid structures in which the child can play – houses, caves, forts, tents, and tunnels
104.	3 years +	Play sets imitating urban and rural areas – commercial establishments, stores, banks, gas stations, parking lots, post offices, schools and classrooms, train and metro stations, hospital, airports, bus stations, zoo parks, Noah's Ark, fruit and vegetable sales stands, towns, farms, and any other toys that imitate places and regions
105.	2 years +	Books – contain special features such as pop-ups, hidden pictures and dress-me
106.	2 years +	Themed mats for play – mats for playing on the floor with designs imitating towns with streets
107.	4 years +	Cards, stickers, and albums for collection – with play function
108.	3 years +	Doll houses and accessories – houses with multiple rooms and furniture imitating kitchen, bedroom, dining room, etc.
109.	3 years +	Fashion dolls and accessories – articulated fashion dolls and their fashion accessories and complements, such as furniture, personal belongings, sports equipment and others
110.	18 months +	Dolls for imitating care activities (bathing and feeding) – simple dolls imitating babies, without hair or with moulded hair, with painted eyes and without articulated arms and legs

Category F — 21 Sub-categories — Toys for creative activities

Sub-category	Starting age	Description and examples of appropriate toys
111.	5 years +	Pattern matching activities – geometrical parts or pins, made of wood or plastic, coloured, to form figures or images
112.	4 years +	Stamps with images of animals, characters, designs, alphabet, etc. for printing
113.	3 years +	Toys for creative activities – coloured paper, felt boards, or plastic sticks to form scenes or figures, parts with magnets to form play scenes
114.	3 years +	Body stickers or paints to be applied on the child – cosmetics, tattoos for skin, and stickers for fingernails
115.	6 years +	Crafts such as weaving looms, needle embroidery kits, or other sewing equipment
116.	3 years +	Insertion and tying toys and crafts – threading beads on yarn or string etc.
117.	4 years +	Perforated and cut out toys
118.	8 years +	Engraving and metal work in simple to complex detail
119.	6 years +	Clay and ceramic crafts for modelling
120.	7 years +	Folding crafts – origami
121.	8 years +	Mock-ups, technical models – aircrafts, boats, cars, and motorcycles with parts to assemble
122.	3 years +	Colouring and painting kits – detailed materials, stencils, and templates for artwork; large assortment of coloured crayons, pencils, thin-tipped felt marker pens, and water colours
123.	2 years +	Colouring and painting materials – simple and limited assortment of materials and templates for artwork; large (easy to grasp) crayons, chalk, broad-tipped felt marker pens, and finger paints

124.	4 years +	Painting sets with water-based paints – with brushes and accessories for paintwork or silk-screen
125.	4 years +	Drawing sets – toys with canvas and mats made of fabric, paper or plastic to draw, colour and/or erase,—magic tracing II type toys, toys for reproduction and imitation of photocopies (pantographs), sets with writing boards, black-boards, or flip Charts
126.	3 years +	Modelling (manual) and moulding (with moulds) –manual modelling and moulding with putty or dough moulds, utensils for working with modelling putty
127.	5 years +	Moulding with plaster and modelling sands
128.	12 months +	Musical toys – simple musical instruments such as: pianos, guitars, drums, tambourines, horns, and others
129.	12 months +	Simple play sets – basic structure with three to five figures with limited detail
130.	4 years +	Electronic musical instruments – realistic and functional keyboards, electrical guitars, electronic drums
131.	3 years +	Puppets and simple theatres made of wood, plastic or fabric, with fixed eyes, and detachable accessories

Category G — 15 Sub-categories — Toys for social relationships

Sub-category	Starting age	Description and examples of appropriate toys
132.	4 years +	Simple card games – simple card games, card decks for family play
133.	7 years +	Social family games – games for several players, with predefined rules, whether or not requiring previous knowledge of miscellaneous subjects, from medium to difficult knowledge levels
134.	4 years +	Co-operative games – board games for teaching teamwork by emphasizing play rather than competition
135.	5 years +	Games of chance – dice, coin flipping, bingo, roulette

136.	4 years +	Table games with pathways – Table games with pathways to be travelled by using dice or spinners for indicating the number of moves
137.	4 years +	Social games for young children – with several players, involving a simple degree of difficulty
138.	5 years +	Ability and skill games – games for balancing parts, capturing, hitting the target, among others that require ability, and fast reaction
139.	4 years +	Electronic ability and skill games – videogames, hand-held videogames, toys that simulate real life by a virtual character (avatar)
140.	5 years +	Simple strategy and reasoning games – checkers, trading card games, dominoes, and similar
141.	6 years +	Games for strategy and reasoning – chess, table games that require strategy
142.	9 years +	Simulation, conquering, and role-playing games – RPG type and simulation, conquering and acquisition games, where the players must make decisions by reviewing several situations and using individual strategies for conquering territories, acquiring assets or real estate properties, building towns, deciding on new positions for characters so as to transform the story
143.	7 years +	General knowledge games – games involving knowledge on miscellaneous subjects
144.	6 years +	Number and letter games (usually multiple players) – games requiring the creation of or the discovery of hidden words or numbers
145.	7 years +	Magic kits
146.	6 years +	Game collections – boxes with miscellaneous games

APPENDIX II

FORMAT FOR DECLARATION BY MANUFACTURER (TO BE SUBMITTED WITH APPLICATION FOR GRANT OF LICENCE)

Date: _____

_____ Branch Office
Bureau of Indian Standards

Subject: Declaration For Application For Grant of Licence for Safety Of Toys Dear Sir,

With reference to my application for grant of licence to use Grant of Licence for Safety of Toys as per Indian Standards under Scheme I of Schedule II of BIS (Conformity Assessment) Regulations, 2018, I hereby declare the following:

1. I am applying for grant of licence/addition in scope of licence (strike out whichever is not applicable) for the following toys:

Type	Description of toy	Category No. and Name	Sub-category No. and Name	Input source for electric toy**	Starting Age	Series No.#	Applicable primary standard	Applicable Secondary standard
Non electric	Rattle	Category A- Toys for sensorimotor activities — First age	Subcategory 1- Rattles and rings	NA	0 months+	S01	IS 9873 Part 1	IS 9873 Part 2, 3 9,10 and 11
	Ring	-do-	-do-	NA	-do-			

*Details in the table are given for illustration. Also see sampling guidelines at Annex-A

** Input source for electric toys - battery operated, transformer operated or dual supply

#Details of models contained in each series with starting ages etc. shall be declared by manufacturer to BIS separately and BIS shall endorse the series wise details of models separately in the licence document as Annexure (see Annex-I)

2. I declare that the above varieties of toys in the same series are of similar design, made from the same materials and covered

under a single sub-category. Design/Photographs and list of materials of the above models are enclosed as per Annex-I

3. I declare that I have read and understood the provisions of the BIS Guidelines for Certification of Toys as per Scheme I of Schedule II of BIS (Conformity Assessment) Regulations, 2018 and agree to abide by the same.
4. I declare that all details and information provided by me above and in my application are true to the best of my knowledge. In case of any discrepancies found in the declared information, I shall be liable for suitable action.

Regards

Signature of Firm's CEO/Director/Authorized Representative

Name/Designation:_____

Firm's Name/Address:_____

ANNEX-I

SERIES WISE LIST OF MODELS

LICENCE NO. CM/L-
NAME OF LICENSEE

1. SERIES NO: (STARTING AGE:)

S.No.	MODEL NUMBER	TOY DESCRIPTION	TOY IMAGE/PHOTO

2. SERIES NO: (STARTING AGE:)

S.No.	MODEL NUMBER	TOY DESCRIPTION	TOY IMAGE/PHOTO

3. SERIES NO: (STARTING AGE:)

S.No.	MODEL NUMBER	TOY DESCRIPTION	TOY IMAGE/PHOTO

4. SERIES NO: (STARTING AGE:)

S.No.	MODEL NUMBER	TOY DESCRIPTION	TOY IMAGE/PHOTO

SIGNATURE

NAME DESIGNATION

DATE

APPENDIX III

**FORMAT FOR DECLARATION BY MANUFACTURER
(TO BE SUBMITTED WITH APPLICATION FOR CHANGE IN SCOPE OF LICENCE I.E. ADDITION OF NEW SERIES)**

Date: _____

_____ Branch Office
Bureau of Indian Standards

Subject: Declaration For Application For Change in Scope of Licence for Safety Of Toys

Dear Sir,

With reference to my application for Change in Scope of Licence for Safety of Toys i.e. addition of new series in the scope of licence as per Indian Standards under Scheme I of Schedule II of BIS (Conformity Assessment) Regulations, 2018, I hereby declare the following:

1. I am applying for addition in scope of licence for the following new varieties (new series) of toys

Type	Description of toy	Category No. and Name	Sub-category No. and Name	Input source for electric toy**	Starting Age	Series No.#	Applicable primary standard	Applicable Secondary standard
Non electric	Rattle	Category A-Toys for sensorimotor activities — First age	Subcategory 1-Rattles and rings	NA	0 months+	S01	IS 9873 Part 1	IS 9873 Part 2, 3 and 9
	Ring	-do-	-do-	NA	-do-			

*Details in the table are given for illustration. Also see sampling guidelines at Annex-A

** Input source for electric toys - battery operated, transformer operated or dual supply

#Details of models contained in each series with starting ages etc. shall be declared by manufacturer to BIS separately and BIS shall endorse the series wise details of models separately in the licence document as Annexure (see Annex-I)

2. I declare that the above **varieties of toys** belong to a new series no. _____ which is not already covered in the scope of my licence.

3. I declare that I have submitted/will submit the requisite fees for extension in scope of licence to BIS.
4. I declare that I have read and understood the provisions of the BIS Guidelines for Certification of Toys as per Scheme I of Schedule II of BIS (Conformity Assessment) Regulations, 2018 and agree to abide by the same.
5. I declare that all details and information provided by me above and in my application are true to the best of my knowledge. In case of any discrepancies found in the declared information, I shall be liable for suitable action

Regards

Signature of Firm's CEO/Director/Authorized Representative

Name/Designation: _____

Firm's Name/Address: _____

ANNEX-I

SERIES WISE LIST OF MODELS

LICENCE NO. CM/L

NAME OF LICENSEE -

5. SERIES NO: (STARTING AGE:)

S.No.	MODEL NUMBER	TOY DESCRIPTION	TOY IMAGE/PHOTO

6. SERIES NO: (STARTING AGE:)

S.No.	MODEL NUMBER	TOY DESCRIPTION	TOY IMAGE/PHOTO

7. SERIES NO: (STARTING AGE:)

S.No.	MODEL NUMBER	TOY DESCRIPTION	TOY IMAGE/PHOTO

8. SERIES NO: (STARTING AGE:)

S.No.	MODEL NUMBER	TOY DESCRIPTION	TOY IMAGE/PHOTO

SIGNATURE

NAME DESIGNATION

DATE

APPENDIX –IV

FORMAT FOR ADDING NEW MODELS TO SERIES ALREADY COVERED IN THE SCOPE OF LICENCE BY LICENSEE

Date

Branch Office Bureau of Indian Standards

Sir/Madam

Subject: Declaration addition of new models in the series already covered in scope of Licence for Safety Of Toys

With reference to my existing licence for safety of toys (Licence No CM/L-.....), I request BIS to add the following new models in the series which are already covered in the scope of my licence

1 SERIES NO: (STARTING AGE:)

S.No.	MODEL NUMBER	TOY DESCRIPTION	TOY IMAGE/PHOTO

2. SERIES NO: (STARTING AGE:)

S.No.	MODEL NUMBER	TOY DESCRIPTION	TOY IMAGE/PHOTO

I declare that the above models belong to the series as indicated above which are already covered in my licence.

I declare that the above information is true and correct to the best of my knowledge and undertake that in case my declaration is found defective or incorrect BIS may take action as deemed appropriate as per the BIS Act, Rules and Regulations which we shall comply with including recall of such products from the market.

Sincerely,

SIGNATURE OF AUTHORISED SIGNATORY NAME
DESIGNATION NAME OF FIRM CM/L-