## INTERNATIONAL TOY SAFETY REQUIREMENTS

Requirements	UK/EUROPE	INDIA
Physical & Mechanical Test	BS EN71 Part 1	IS 9873 Part 1
Flammability Test (Textile Material / Pile Fabric / Pile Materials)	BS EN71 Part 2	IS 9873 Part 2
Flammability Test (Solid Material / Toy Products)	BS EN71 Part 2	IS 9873 Part 2
Toxic Element Test	BS EN71 part 3	IS 9873 Part 3
Cleanliness of Stuffing Material	BS EN71 Part 1	IS 9873 Part 1
Phthalates	99/815/EC	
Battery Operated Toy Safety Test	EN50088	IS 9873Part 1 Annex A
Electromagnetic Compatibility	89/336/EEC	C-Tick

## TOYS ABUSE TEST CONDITIONS COMPARISION FOR INTERNATIONAL TOY SAFETY REQUIREMENTS

Country		UK/Europe	INDIA
Test	Age (Months)	EN71 Part 1	IS 9873 Part 1
Small Parts	0 to 36	Toy and parts shall not fit entirely within small part cylinder under its own weight before and after abuse tests	
Sharp Points & Sharp Edges	0 to 36	Must not include a hazardous point or edge before and after abuse tests	Must not include a hazardous point or edge before and after abuse tests
	>36 to 96	May contain functional point or edge if labeled (ages 3 yrs and up)	May contain functional point or edge if labeled (ages 3 yrs and up)
	>96 to 168	May contain functional point or edge if labeled (ages 3 yrs and up)	
Drop Test	0 to 18	850 mm (2.8 ft.), 5 drops	138 cm (4.53 ft.), 10 drops
	>18 to 36	850 mm (2.8 ft.), 5 drops	93 cm (3.1 ft.), 4 drops
	> 36 to 96	850 mm (2.8 ft.), 5 drops * up to 14 yrs	93 cm (3.1 ft.), 4 drops
Impact Test	0 to 168	1 kg mass from 100 mm	
Tip Over Test	0 to 96	3 times * up to 14 yrs	3 times * up to 14 yrs
Torque Test	0 to 18	0.34 N-m (3 in-lb)	0.45 N-m (4 in-lb)
	> 18 to 36	0.34 N-m (3 in-lb)	
	> 36 to 96	0.34 N-m (3 in-lb) * up to 14 yrs	
Tension Test	0 to 18	Dimension ≤ 6 mm, 50 N (11.2 lb)     Dimension > 6 mm, 90 N (20.2 lb)     70 N (15.7 lb) for seam of soft toy     60 N (13.5 lb) for protective tip	70 N (15.7 lb)
	> 18 to 36	<ul> <li>Dimension ≤ 6 mm, 50 N (11.2 lb)</li> <li>Dimension &gt; 6 mm, 90 N (20.2 lb)</li> <li>70 N (15.7 lb) for seam of soft toy</li> <li>60 N (13.5 lb) for protective tip</li> </ul>	70 N (15.7 lb)
	> 36 to 96	<ul> <li>Dimension ≤ 6 mm, 50 N (11.2 lb)</li> <li>Dimension &gt; 6 mm, 90 N (20.2 lb)</li> <li>60 N (13.5 lb) for protective tip</li> <li>* up to 14 yrs</li> </ul>	70 N (15.7 lb)
Compression Test	0 to 18	110 N (24.7 lb)	114 N (25.6 lb)
•	> 18 to 36	110 N (24.7 lb)	114 N (25.6 lb)
<u> </u>	> 36 to 96	110 N (24.7 lb) * up to 14 yrs	136 N (30.5 lb)
Flexure Test	0 to 18	Bend 30 cycles of 120° at a rate of 1 cycle / 2 sec., rest 60 secs. every 10 cycles, 70 N (15.7 lb) bending force.	Bend 30 cycles of 120° at a rate of 1 cycle / 2 sec., rest 60 secs. every 10 cycles, 70 N (15.7 lb) bending force.
	> 18 to 96	Bend 30 cycles of 120° at a rate of 1 cycle / 2 sec., rest 60 secs. every 10 cycles, 70 N (15.7 lb) bending force. * up to 14 yrs	Bend 30 cycles of 120 at a rate of 1 cycle / 2 sec., rest 60 secs. every 10 cycles, 70 N (15.7 lb) bending force.

<sup>\*</sup> For specific items only.

## **TOYS HEAVY METALS REQUIREMENTS**

Country	UK/EUROPE		INDIA	
Standards	EN71 Part 3		IS 9873 Part 3	
Toys Materials	TM 1,2,3	TM 4	TM 1,2,3	TM 4
	(a & b)		(a & b)	
Elements	mg/kg	mg/kg	mg/kg	mg/kg
Arsenic (As)	25 S	25 S	25 S	25 S
Mercury (Hg)	60 S	25 S	60 S	25 S
Selenium (Se)	500 S	500 S	500 S	500 S
Antimony (Sb)	60 S	60 S	60 S	60 S
Lead (Pb)	90 S	90 S	90 S	90 S
Cadmium (Cd)	75 S	50 S	75 S	50 S
Barium (Ba)	1000 S	250 S	1000 S	250 S
Chromium (Cr)	60 S	25 S	60 S	25 S

Notes:

= Total Content = Soluble Content

mg/kg = ppm

TM = 1. Surface Coating
2. Polymeric material, paper, textiles, mass coloured materials and materials intended to leave a trace

3a. Glass / ceramic

3b. Metallic material

4. Modeling clay and finger paint