



Toys safety

HCT-2016-10-02

ASTM F963-11 updated to 2016 version

Background

ASTM was published firstly as a voluntary standard. 14 August 2008, CPSIA was signed and it specified that from the date 10 February 2009, ASTM would be carried out as mandatory standard. November 2011, ASTM F963-11 was approved and published and came into effect on year 2012. 19 October 2016, ASTM published <Standard Consumer Safety Specification for Toy Safety> ASTM F963 2016 version, this 2016 version will come into effect on the middle of year 2017. According to the provisions in CPSIA, if no new requirements from the CPSC, the updated parts will become mandatory 180 days from the date ASTM F963-16 published.

ASTM F963-11 specified strict mechanical and physical properties, flammability and chemical requirements, the limit for chemical requirements stay the same in 2016 version, part of the limits of the chemical requirements are: lead in coating $\leq 90\text{ppm}$, lead in substrate $\leq 100\text{ppm}$

TABLE 1 Maximum Soluble Migrated Element in ppm (mg/kg) for Surface Coatings and Substrates Other Than Modeling Clay Included as Part of a Toy:

Antimony, (Sb)	Arsenic, (As)	Barium, (Ba)	Cadmium, (Cd)	Chromium, (Cr)	Lead, (Pb)	Mercury, (Hg)	Selenium, (Se)
60ppm	25ppm	1000ppm	75ppm	60ppm	90ppm	60ppm	500ppm

TABLE 2 Maximum Soluble Migrated Element in ppm (mg/kg) for Modeling Clays Included as Part of a Toy

Antimony, (Sb)	Arsenic, (As)	Barium, (Ba)	Cadmium, (Cd)	Chromium, (Cr)	Lead, (Pb)	Mercury, (Hg)	Selenium, (Se)
60ppm	25ppm	250ppm	50ppm	25ppm	90ppm	25ppm	500ppm

2016 version updated as below:

- **Amended Projectile toys requirements to be in line with the international standards**
 1. Kinetic Energy Density (KED) was revised to 2500 J/m² to be in line with ISO 8124 & EN 71
 2. Added the length of the suction cup projectile requirements to 57mm
 3. Added mouth-actuated projectile toys requirements, foam shaft and suction toys requirements
 4. Required Projectiles with rigid leading edges to be tested with tip assessment gauge
- **Added magnet requirements**
 1. Added soaking test (same as ISO 8124 & EN 71) requirements for wooden toys, toys intended to be used in water, and mouth pieces of mouth-actuated toys with magnets or magnetic components; added compression test (magnets that are accessible but cannot be grasped);
 2. Specified the metal disk shape
- **Revised microbiology requirements ;**
 1. Added CTFA Microbiology Guidelines;
 2. Specified water bacteriological standards

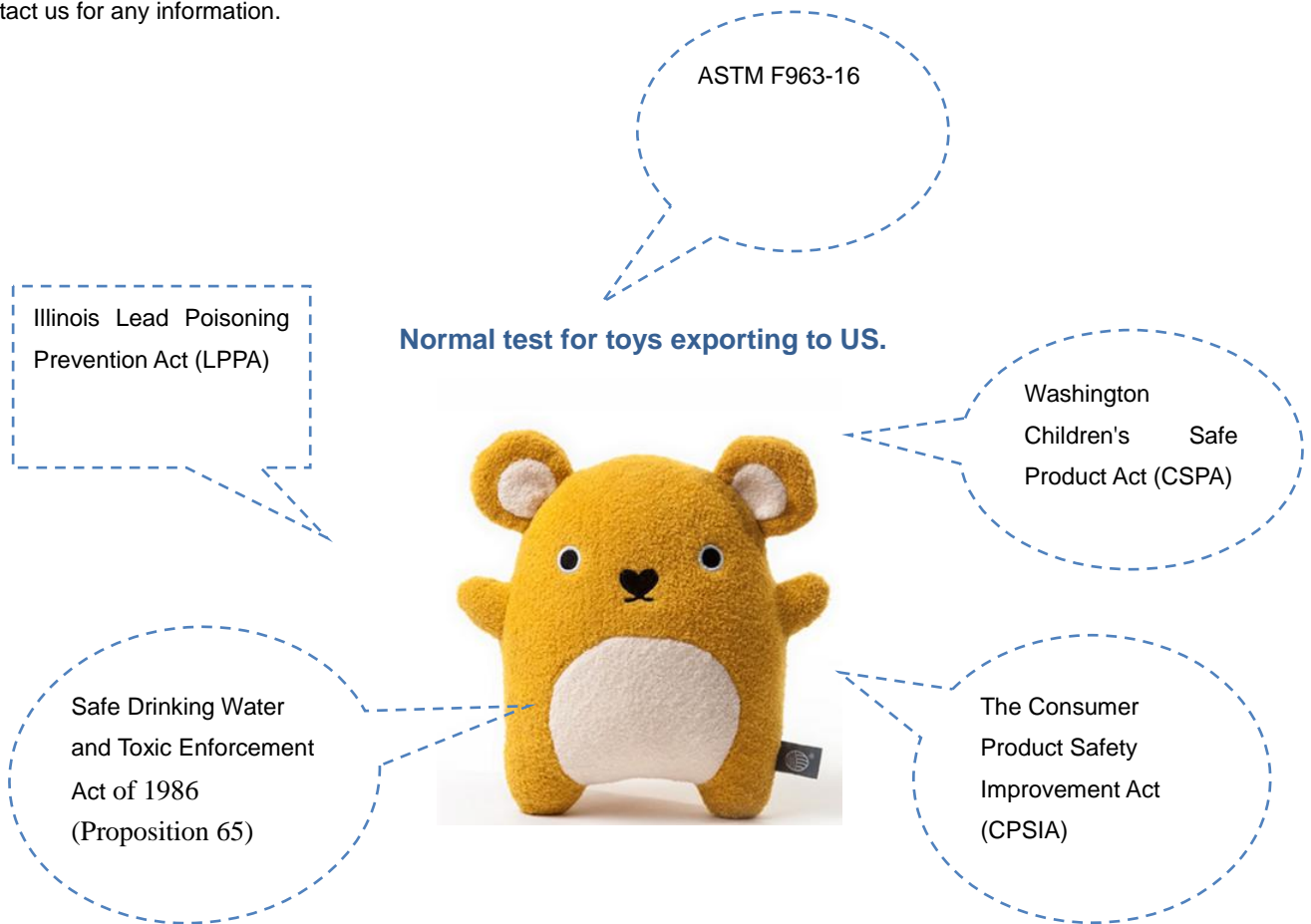




- Added label requirements to consumer replaceable button or coin cell batteries that are 1.5 volts or greater
- Added expanding toys requirements and specified test method and test equipment
- Added the test requirements for toy chest
- Simplified the test method for stuffing material
- Added lithium ion batteries temperature / current requirements
- Amended part of the sound producing toys requirements to be in line with EN 71
- Added the definition of push/pull toy
- Banned leather belt to be used as toy safety belt
- Added ride-on toys control quality
- Specified ride-on toys stability/ overload requirements
- Others

HCT SOLUTIONS:

This revision mainly updated the physical requirements, related enterprises should pay great attention to the update information. Toys exporting to US. not only need to comply with the ASTM requirements but also CPSIA requirements and related state requirements. HCT has the capability to test toys, could help provide toys testing to enterprises, please contact us for any information.



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