

# SAFEGUARDS

SGS CONSUMER TESTING SERVICES

HARDLINES

NO. 046/09 MARCH 2009

## ASTM F963-2008 PUBLISHED: AN OVERVIEW OF MAJOR CHANGES

In February 2009, ASTM F963 was revised and ASTM F963-08 was published on February 17, 2009. This standard was previously revised in May 2007 and a number of new requirements were added to this standard. They were magnets, elastic tether balls (yo-yo balls), packaging film, and cords, straps & elastic.

Major changes in the 2008 version compared to the current 2007 toy standard are:

### 1. Toy Chest

Toy chests are no longer covered by ASTM F963; instead, Consumer Safety Specification ASTM F834 will cover the requirements for toy chests.

### 2. Magnet and Magnetic Components

New definition and new abuse tests have been introduced for hazardous magnets and hazardous magnetic components:

- a. New definition for hazardous magnets and hazardous magnetic components:
  - Has a flux index > 50
  - Small object (using the small parts cylinder)
- b. New abuse testing (must be performed in series)  
Cycling as received → Impact Test → Torque Test → Tension Test → Cycling
- c. Modified Requirements
  - For general toys, for children up to 14 years of age, toys cannot contain any hazardous magnets or hazardous magnetic components before and after abuse testing.
  - Safety labeling on packaging is required for hobby, craft, and science kit-type items that are suitable for children over 8 years of age.

### 3. Flammability

This section has been modified for existing flammability testing procedures for solids and soft toys and flammability testing procedures for fabrics has been added in Annex A5.

### 4. Sound – Producing Toys

The requirement and testing method for push/pull toys have been modified. The weighting has been changed to C-weighted peak sound pressure level,  $L_{cpeak}$ , of impulsive sounds and will be measured twice on each side for the pass-by tests.

### 5. Folding Mechanisms and Hinges

This section has been modified such that the requirement is not limited to toys intended to support the weight of a child. Hinges can present potential pinch hazards regardless of whether the toy is intended to support the weight of a child.

- Folding Mechanisms
  - NOT ONLY FOR TOYS INTENDED TO SUPPORT THE WEIGHT OF A CHILD BUT ALSO FOR TOYS THAT ARE LIKELY TO SUPPORT THE WEIGHT OF A CHILD IN NORMAL USE.

The logo for SGS, consisting of the letters 'SGS' in a bold, sans-serif font, with a vertical line to the right of the letters and a horizontal line below the letters.

One way to determine if a child can sit on a product is to verify that the surface would accommodate the hip breadth of a child in the age range for which the product is intended. Examples of products to which these requirements would apply include, but are not limited to, folding mechanisms in toy strollers a child can sit in, toy chairs a child can sit in, or a child-sized ironing board.

- Specific test method for the locking devices has been introduced. The folding unit shall remain in its recommended use position when a force of 45 lbf (200N) is applied to the product in the direction normally associated with folding. For single action locking device, it shall require a minimum force of 10 lbf (45 N) to activate the release mechanism while double action locking device shall require two distinct and separate actions to release. There are no force requirements for double action locking devices.
- Hinges
  - In previous versions of ASTM F963 standard, the requirement for hinge-line clearance is applicable to toy intended to support the weight of a child, while the new standard requires all toys having a gap or clearance along the hinge line between a stationary portion and a moveable portion that weighs more than 1/2 lb (0.2 kg) shall be so constructed that, if the accessible gap at the hinge line will admit a 3/16-in. (5-mm) diameter rod, it will also admit a 1/2-in. (13-mm) diameter rod at all positions of the hinge. Examples of toy are toy jewelry box and musical box.

## 6. Certain Toys with Spherical Ends

This section has been modified such that the requirement is not limited to toys intended to the age of 18 months and preschool play figures but also for children between the ages of 18 and 48 months, nail, screw, and bolt shapes that weigh less than 1.1 lb (0.5 kg) and incorporate spherical or hemispherical ends attached to a shaft or handle. Such ends shall not capable of entering and penetrating past the full depth of the cavity of the supplemental test fixture.

## 7. Yo-Yo Elastic Tether Toys

A new exemption is introduced for this requirement. Sports balls with wrist or ankle straps longer than 70 cm (27.6 in.) intended to be kicked or thrown and returned to the user are exempt from yo-yo elastic tether toys requirements.

## 8. Jaw Entrapment in Handles and Steering Wheels

- New safety concern:
  - Concern about the potential jaw entrapment in handles and steering wheels that are located such that they are accessible for teething in the following categories of toys intended for children under 18 months of age.
    - a. Activity tables intended to be played with by a standing child,
    - b. Large bulky toys,
    - c. Stationary floor toys,
    - d. Push toys intended to be pushed by a child walking upright,
    - e. Ride-on toys.
- New safety requirement:
  - Openings in handles and steering wheels that allow passage of a 0.75 by 0.75 in. (1.9 by 1.9 cm) block of any depth greater than 0.5 in. (1.3 cm) must also allow passage of a 1.5 by 2.5 in. (3.8 by 6.35 cm) block of any depth greater than 0.5in. (1.3 cm).

Throughout our global network of laboratories, SGS can provide a range of services for toys. Don't hesitate to contact us for more information.

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