

Australian/New Zealand Standard™

Safety of toys

**Part 2: Flammability
(ISO 8124.2:1994, MOD)**

AS/NZS ISO 8124.2:2003

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee CS-018, Safety of Children's Toys. It was approved on behalf of the Council of Standards Australia on 31 March 2003 and on behalf of the Council of Standards New Zealand on 18 March 2003. It was published on 15 April 2003.

The following are represented on Committee CS-018:

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Australian Consumers Association
Australian Hearing
Australian Retailers Association
Commerce Commission New Zealand
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Australian/New Zealand Standard™

Safety of toys

Part 2: Flammability (ISO 8124.2:1994, MOD)

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee CS-018, Safety of Children's Toys. It is an adoption with national modifications and has been reproduced from ISO 8124-2:1994, *Safety of toys, Part 2: Flammability*.

The objective of this Standard is to provide flammability requirements for toys, and flammability labelling requirements for certain materials used in or on toys.

For the purpose of this Standard, the ISO text is modified as set out in Appendix ZZ. These changes are indicated by a marginal bar against the relevant clause or part thereof affected.

The changes were made to ISO 8124-2 for the following reasons:

- (a) To utilize information in Australia and New Zealand.
- (b) To use terms more commonly in use in Australia and New Zealand.
- (c) To improve control of tests by incorporating a minimum number of specimens to be tested and correcting the size of test specimen.
- (d) To include additional advice.

As this Standard is reproduced from an international publication, the following applies.

- (i) Its number appears on the cover and title page while the International Standard number appears only on the cover.
- (ii) In the source text, 'this part of ISO 8124' should read 'this Australian/New Zealand Standard'.
- (iii) A full point substitutes for a comma when referring to a decimal marker.

References to international Standards should be replaced by Australian, New Zealand or Australian/New Zealand Standards, as follows:

Reference to International Standard or other Australian/New Zealand Standard publication

ISO	AS	
2431	Paints and varnishes—Determination of flow time by use of flow cups	—
6941	Textile fabrics—Burning behaviour— Measurement of flame spread properties of vertically oriented specimens	2755 Textile fabrics—Burning behaviour 2755.2 Part 2: Measurement of flame spread properties of vertically oriented specimens
EN		
71	Safety of toys	—
71-5	Part 5: Chemical toys (sets) other than experimental sets	—

The term 'normative' has been used in this Standard to define the application of the appendix to which it applies. A 'normative' appendix is an integral part of a Standard.

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INTRODUCTION

There is very little data concerning the hazards associated with the flammability of toys. There is a lot of concern over perceived risks but little in the way of hard facts.

Over 80 % of deaths of children arising from fires are due to asphyxiation from fumes. ISO 8124 was never intended to address this aspect as it deals strictly with the flammability of materials. In any case, the percentage of combustible materials derived from toys in the child's environment is insignificant compared with that of other household material such as furniture, curtains, beds.

ISO 8124 has been devised to address certain hazards. Virtually all materials burn if exposed for long enough to the right ignition source. It has therefore been decided to address toy items that:

- a) are clothes worn by the child (disguise costumes), especially where capes, flowing dresses and similar articles are included;
- b) a child could enter, such as play tents and play houses;
- c) a child cuddles (filled soft toys);
- d) are worn but take the form of masks, wigs, etc.

The hazards to be addressed in these cases arise because of the intimate contact between the child and the product. If ignited, the materials should burn with a rate of spread of flame which allows the child to remove, drop or get out of the product before serious injury occurs.

AUSTRALIAN/NEW ZEALAND STANDARD

Safety of toys

Part 2:

Flammability

(ISO 8124.2:1994, MOD)

1 Scope

This part of ISO 8124 specifies the categories of flammable materials which are prohibited in all toys and requirements concerning flammability of certain toys when they are submitted to a small source of ignition.

The test methods described in clause 5 are used for the purposes of determining the flammability of toys under the particular test conditions specified. The test results thus obtained cannot be considered as providing an overall indication of the potential fire hazard of toys or materials when subjected to other sources of ignition.

This part of ISO 8124 includes general requirements relating to all toys and specific requirements and methods of test relating to the following toys which are considered as being those presenting the greatest hazard:

- beards, moustaches, wigs, masks and other products worn on the head with pile, hair or other attached material;
- disguise costumes (e.g. cowboy outfits, nurses' uniforms) including the associated headgear, and toys intended to be worn by a child (excluding products covered by 4.2 and paper novelty hats, e.g. those supplied in crackers);
- toys intended to be entered by a child (e.g. toy tents, puppet theatres, wigwams);
- filled soft toys with a pile surface or textile surface but excluding soft-bodied dolls with heads and

limbs made entirely from nontextile polymeric material.

NOTE 1 Additional requirements for the flammability of electrical toys are specified in EN 50088, *Safety of electrical toys*.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 8124. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 8124 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 2431:1993, *Paints and varnishes — Determination of flow time by use of flow cups*.

ISO 6941:1984, *Textile fabrics — Burning behaviour — Measurement of flame spread properties of vertically oriented specimens*.

EN 71-5:1993, *Safety of toys — Part 5: Chemical toys (sets) other than experimental sets*.

3 Definitions

For the purposes of this part of ISO 8124, the following definitions apply.

3.1 flammability: The ability of a material or a product to burn with a flame under specified test conditions.