# UL 697

## STANDARD FOR SAFETY

Toy Transformers

UL Standard for Safety for Toy Transformers, UL 697

Seventh Edition, Dated March 3, 2011

***Summary of Topics***

***This revision of ANSI/UL 697 dated July 1, 2021 is being issued to update the title page to reflect the most recent designation as a Reaffirmed American National Standard (ANS). No technical changes have been made.***

Text that has been changed in any manner or impacted by UL's electronic publishing system is marked with a vertical line in the margin.

The requirements are substantially in accordance with Proposal(s) on this subject dated May 14, 2021.

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# UL 697

## Standard for Toy Transformers

First Edition – September, 1973
Second Edition – February, 1975
Third Edition – January, 1986
Fourth Edition – June, 1993
Fifth Edition – May, 1998
Sixth Edition – October, 2004

**Seventh Edition**

**March 3, 2011**

This ANSI/UL Standard for Safety consists of the Seventh edition including revisions through July 1, 2021.

The most recent designation of ANSI/UL 697 as a Reaffirmed American National Standard (ANS) occurred on July 1, 2021. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, and Title Page.

Comments or proposals for revisions on any part of the Standard may be submitted to UL at any time. Proposals should be submitted via a Proposal Request in UL's On-Line Collaborative Standards Development System (CSDS) at https://csds.ul.com.

No Text on This Page

## CONTENTS

### INTRODUCTION



### CONSTRUCTION



### PERFORMANCE

## INTRODUCTION

### 1 Scope

1.1 These requirements cover toy transformers designed to be used on nominal 120-V branch circuits. A toy transformer is a step-down isolating transformer of the low-secondary-voltage type. It is intended primarily to supply current to electrically operated toys, and as such is expected to be subjected to careless use and probable short circuit of the secondary terminals. Accordingly, the design of a toy transformer takes into consideration the rather unusual risk of fire that may be involved, and the construction is made to reduce the risk of fire with respect to the ignition of nearby combustible material as the result of overheating or eventual inoperative condition of the transformer itself.

1.2 These requirements do not cover toys or the like designed to operate from the secondary output of a toy transformer.

1.3 Toy transformers marked "Class 2" are evaluated to the requirements in the Standard for Class 2 Power Units, UL 1310, and to the requirements in this Standard.

### 2 Components

2.1 Except as indicated in 2.2, a component of a product covered by this standard shall comply with the requirements for that component. See Appendix A for a list of standards covering components generally used in the products covered by this standard.

2.2 A component is not required to comply with a specific requirement that:

a) Involves a feature or characteristic not required in the application of the component in the product covered by this standard, or

b) Is superseded by a requirement in this standard.

2.3 A component shall be used in accordance with its rating established for the intended conditions of use.

2.4 Specific components are incomplete in construction features or restricted in performance capabilities. Such components are intended for use only under limited conditions, such as certain temperatures not exceeding specified limits, and shall be used only under those specific conditions.

### 3 Units of Measurement

3.1 Values stated without parentheses are the requirement. Values in parentheses are explanatory or approximate information.

### 4 Undated References

4.1 Any undated reference to a code or standard appearing in the requirements of this standard shall be interpreted as referring to the latest edition of that code or standard.

### 5 Glossary

5.1 For the purpose of this Standard the following definitions apply.