AS 60695.7.2—2006
IEC/TR 60695-7-2, Ed 1.0 (2002)

AS 60695.7.2—2006

Australian Standard™

Fire hazard testing

Part 7.2: Toxicity of fire effluent—Summary and relevance of test methods

This Australian Standard® was prepared by Committee EL-053, Fire hazard testing—Electrotechnical equipment. It was approved on behalf of the Council of Standards Australia on 23 May 2006.
This Standard was published on 23 June 2006.

The following are represented on Committee EL-053:

- Australian Electrical and Electronic Manufacturers Association
- Australian Information Industry Association
- Electrical Compliance Testing Association
- Electrical Regulatory Authorities Council
- Energy Networks Association

This Standard was issued in draft form for comment as DR 06186.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through public comment period.

Keeping Standards up-to-date

Australian Standards® are living documents that reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued.

Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting **www.standards.org.au**

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at **mail@standards.org.au**, or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

Australian Standard™

Fire hazard testing

Part 7.2: Toxicity of fire effluent—Summary and relevance of test methods

First published as AS 60695.7.2—2006.

Published by Standards Australia GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 7552 7

PREFACE

This Standard was prepared by the Standards Australia Committee EL-053, Fire hazard testing—Electrotechnical equipment.

The objective of this series of standards is to provide the electrotechnology industry and standards writing committees with a series of standards which give guidance on assessing the fire hazard of electrotechnical products.

This Standard is identical with, and has been reproduced from IEC/TR 60695-7-2, Ed 1.0 (2002), *Fire hazard testing - Part 7-2: Toxicity of fire effluent - Summary and relevance of test methods.*

As this Standard is reproduced from an International Standard, the following applies:

(a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.

(b) In the source text 'IEC/TS 60695-7-2' should read 'AS 60695.7.2'.

(c) A full point should be substituted for a comma when referring to a decimal marker.

(d) Any French text on figures should be ignored.

The terms 'normative' and 'informative' are used to define the application of the annex to which they apply. A normative annex is an integral part of a standard, whereas an informative annex is only for information and guidance.

Any International Standard referenced should be replaced by an equivalent Australian Standard where one is available. The availability of equivalent Australian Standards can be determined either from the Standards Web Shop at www.standards.com.au or from the annual printed catalogue of Australian Standards.

CONTENTS

INTRODUCTION

The IEC 60695-7 series provides guidance to IEC product committees on the adoption and implementation of the recommendations of ISO TC 92, for the minimization of toxic hazard from fires involving electrotechnical products.

Electrotechnical products, primarily as the objects of a fire, may contribute to the fire hazard due to release of toxic effluent, which may be a significant contributing factor to the overall fire hazard.

IEC product committees incorporating requirements for the assessment of toxic hazard in product standards should note that toxic potency and other measurements of toxicity which are described in this technical report should not be used directly in product specification. Data from toxic potency test methods should only be used as part of a toxic hazard assessment, in conjunction with other product based reaction to fire data such as mass loss rate.

STANDARDS AUSTRALIA

Australian Standard

Fire hazard testing
Part 7.2: Toxicity of fire effluent—Summary and relevance of test methods

1 Scope

This technical report gives a brief summary of the test methods that are in common use in the assessment of lethal and sublethal acute toxic potency, and other toxicity tests. It includes special observations on their relevance to real fire scenarios and gives recommendations on their use.

It advises which tests provide toxic potency data which is relevant to real fire scenarios, and which are suitable for use in fire hazard assessment and fire safety engineering.

One of the responsibilities of a technical committee is, wherever applicable, to make use of basic safety publications in the preparation of its publications.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60695-7-1:1993, *Fire hazard testing - Part 7: Guidance on the minimization of toxic hazards due to fires involving electrotechnical products – Section 1: General*

IEC/TS 60695-7-3:1998, *Fire hazard testing – Part 7-3: Toxicity of fire effluent – Use and interpretation of test results*

IEC Guide 104:1997, *The preparation of safety publications and the use of basic safety publications and group safety publications*

ISO/TR 9122-1:1989, *Toxicity testing of fire effluents – Part 1: General*

ISO/IEC 13943:2000, *Fire safety – Vocabulary*

3 Definitions

For the purposes of this part of IEC 60695, definitions taken from ISO/IEC 13943 and IEC 60695-7-3 apply.

3.1
burn
to undergo combustion

(ISO/IEC 13943, definition 10)