JIS

JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS C 0076 : 1997

(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

The code number of this Standard changed from JIS C 0076 to the following from 20 March 2004.

JIS C 60695-7-1:1997

ICS 19.040; 19.080; 29.020

Descriptors : electrical equipment, electrically-operated devices, electrical components, electronic equipment and components, environmental testing, electrical testing, fire resistance

Reference number : **JIS C 0076 : 1997 (E)**

Documents
Document Sharing Hub
PROTECTED BY COPYRIGHT

Full document details: JIS C 60695-7-1-1997 (JIS C 0076-1997)

Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of International Trade and Industry through deliberations at Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law:

Date of Establishment: 1997-11-20

Date of Public Notice in Official Gazette: 1997-11-20

Investigated by: Japanese Industrial Standards Committee
Divisional Council on Electricity

JIS C 0076:1997, First English edition published in 2000-03

Translated and published by: Japanese Standards Association
4-1-24, Akasaka, Minato-ku, Tokyo, 107-8440 JAPAN

In the event of any doubts arising as to the contents, the original JIS is to be the final authority.

© JSA 2000
All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Printed in Japan

Documents
Document Sharing Hub
PROTECTED BY COPYRIGHT

Full document details: JIS C 60695-7-1-1997 (JIS C 0076-1997)

Contents

		Page
Introduction		1
1	Scope	2
2	Normative reference	2
3	Definitions	2
4	Principles of assessing toxic hazard in fires	3
5	Unusual specific toxicity and extreme toxic potency	5
6	Toxic hazard and hazard assessment	5
Annex A (informative)	Bibliography	7

Documents
Document Sharing Hub
PROTECTED BY COPYRIGHT

Full document details: JIS C 60695-7-1-1997 (JIS C 0076-1997)

JAPANESE INDUSTRIAL STANDARD

JIS C 60695-7-1:1997
(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

Introduction

This Japanese Industrial Standard has been prepared based on the 1st edition issued in 1993 of **IEC 60695-7-1** *Fire hazard testing—Part 7: Guidance on the minimization of toxic hazards due to fires involving electrotechnical products—Section 1: General* without changing the technical contents.

Furthermore, the matters that are indicated by underline (dotted line) do not appear in the original International Standard. The numbers of **IEC** standards are indicated by the new numbering system put in force on January 1, 1997. Those standards published before that date are also renumbered by adding 60000 to the previous number. This is merely a change of number, without any change of contents.

Electrotechnical products frequently become involved in fires. However, except for certain specific cases (e.g., power generating stations, mass transit tunnels, computer suites), electrotechnical products are not normally present in sufficient quantities to form the major source of toxic hazard. For example, in domestic dwellings and places of public assembly, electrotechnical products are usually a very minor source of fire effluent compared with, for example, furnishings.

This Standard endorses **ISO/TR 9122-1** : 1989, *Toxicity testing of fire effluents—Part 1 : General*. The following is a summary of the views expressed in that technical report.

"Small-scale toxic potency tests as we know them today are inappropriate for regulatory purposes. They cannot provide rank orderings of materials with respect to their propensity to produce toxic atmospheres in fires. All currently available tests are limited because of their inability to replicate the dynamics of fire growth which determine the time/concentration profiles of the effluent in full-scale fires, and the response of electrotechnical products, not just materials. This is a crucial limitation because the toxic effects of combustion effluent are now known to depend much more on the rates and conditions of combustion than on the chemical constitution of the burning materials."

The evidence from real fires and fire casualties, when taken with data from experimental fire and combustion toxicity studies, suggests that chemical species of unusual specific toxicity are not important (see clause 5). Carbon monoxide is by far the most significant agent contributing to toxic hazard. Other agents of major significance are hydrogen cyanide, carbon dioxide, heat (both radiative and convective), hypoxia (depleted oxygen), and irritants (Annex A, bibliographic documents [1], [2] and [3]).

Documents
Document Sharing Hub
PROTECTED BY COPYRIGHT

Full document details: JIS C 60695-7-1-1997 (JIS C 0076-1997)