

Translated and Published by Japanese Standards Association

JIS T 8020 : 2020

(JSAA/JSA)

Protective clothing — Protection against heat and fire — Method of test: Evaluation of materials and material assemblies when exposed to a source of radiant heat

Date of Establishment: 2005-12-25 Date of Revision: 2020-03-25 Date of Public Notice in Official Gazette: 2020-03-25 Investigated by: Japanese Industrial Standards Committee Standards Board for ISO area Technical Committee on Safety

JIS T 8020 : 2020, First English edition published in 2020-10

Translated and published by: Japanese Standards Association Mita MT Building, 3-13-12, Mita, Minato-ku, Tokyo, 108-0073 JAPAN

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

© JSA 2020

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

Contents

Page

Introduction	
1	Scope
2	Normative reference
3	Terms and definitions ······2
$\begin{array}{c} 4\\ 4.1\\ 4.2 \end{array}$	Principle 3 Method A 3 Method B 3 3
5 5.1 5.2 5.3 5.4 5.5 5.6	Apparatus3General3Source of radiation3Test specimen holder5Calorimeter5Temperature recorder7Apparatus location7
6	Sampling ······7
7 7.1 7.2 7.3	Test conditions and conditioning atmosphere ······ 8 Test conditions ····· 8 Testing atmosphere ···· 8 Incident heat flux density level ···· 8
8 8.1 8.2 8.3 8.4 8.5 8.6	Test method8Preliminary measures8Calibration of the radiant source9Test method A10Evaluation A10Test method B10Evaluation B10
9	Test report ······11
Annex	A JA (informative) Comparison table between JIS and corresponding International Standard

Foreword

This Japanese Industrial Standard has been revised by the Minister of Health, Labour and Welfare and the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Japan Safety Appliances Association (JSAA)/ Japanese Standards Association (JSA) with a draft being attached, based on the provision of Article 12, paragraph (1) of the Industrial Standardization Act applied mutatis mutandis pursuant to the provision of Article 16 of the said Act. This edition replaces the previous edition (**JIS T 8020**:2005), which has been technically revised.

This **JIS** document is protected by the Copyright Act.

Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, published patent application or utility model rights. The relevant Ministers and the Japanese Industrial Standards Committee are not responsible for identifying any of such patent rights, published patent application or utility model rights.

Protective clothing — Protection against heat and fire — Method of test : Evaluation of materials and material assemblies when exposed to a source of radiant heat

Introduction

This Japanese Industrial Standard has been prepared based on **ISO 6942** : 2002, Edition 3, with some modifications of the technical contents in consideration of convenience in usage.

The dotted underlines indicate changes from the corresponding International Standard. A list of modifications with the explanations is given in Annex JA.

1 Scope

This Standard specifies two complementary methods (Method A and Method B) for determining the behaviour of materials used for protective clothing against heat and fire subjected to heat radiation. These tests are carried out on representative single or multi-layer textiles or other materials intended for clothing for protection against radiant heat. They are also applicable to assemblies, which correspond to the overall build up of a heat protective clothing assembly with or without underclothing.

Method A serves for visual assessment of any changes in the material after the action of heat radiation. With Method B the protective effect of the materials is determined. The materials may be tested either by both methods or only by one of them.

The tests according to these two methods serve to classify materials; however, to be able to make a statement or prediction as to the suitability of a material for protective clothing, additional criteria shall be taken into account.

Since the tests are carried out at room temperature, the results do not necessarily correspond to the behaviour of the materials at higher ambient temperatures and therefore are only to a limited extent suitable for predicting the performance of the protective clothing made from the materials under test.

NOTE The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 6942: 2002 Protective clothing — Protection against heat and fire — Method of test : Evaluation of materials and material assemblies when exposed to a source of radiant heat (MOD)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standard and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21-1**.