

Translated and Published by Japanese Standards Association

JIS T 8050: 2005

(JSAA/JSA)

Protective clothing — Mechanical properties — Test method for the determination of the resistance to puncture and dynamic tearing of materials

T 8050: 2005

Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Health, Labour and Welfare and the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal of establishing a Japanese Industrial Standard from Japan Safety Appliances Association (JSAA)/Japanese Standards Association (JSA), with a draft of Industrial Standard based on the provision of Article 12 Clause 1 of the Industrial Standardization Law.

This Standard has been made based on ISO 13995:2000 Protective clothing—Mechanical properties—Test method for the determination of the resistance to puncture and dynamic tearing of materials for the purpose of making it easier to compare this Standard with International Standard; to prepare Japanese Industrial Standard conforming with International Standard; and to propose a draft of an International Standard which is based on Japanese Industrial Standard.

Attention is drawn to the possibility that some parts of this Standard may conflict with a patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have technical properties. The relevant Ministers and the Japanese Industrial Standards Committee are not responsible for identifying the patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have the said technical properties.

Date of Establishment: 2005-12-25

Date of Public Notice in Official Gazette: 2005-12-26

Investigated by: Japanese Industrial Standards Committee

Standards Board

Technical Committee on Protective Equipment for

Occupational Safety

JIS T 8050: 2005, First English edition published in 2006-11

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 2006

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

	Pag
Intro	duction 1
1	Scope
2	Normative reference
3	Terms and definitions
4	Test apparatus and procedures
4.1	Principle of the puncture and dynamic tear test
4.2	Types of tear and their measurement
4.3	Performance levels
4.4	Test apparatus3
4.5	Falling mass - blade holding block
4.6	The tearing blade
4.7	The test specimen mounting block and clamps4
4.8	Preparing the apparatus4
4.9	Preparation of test specimens
4.10	Mounting the test specimens
4.11	Carrying out a test
4.12	Classification of results
4.13	Test report7
Anne	x A (informative) Information annex on the specification of puncture and dynamic tear tests on materials and clothing
Anne	x 1 (informative) Comparison table between JIS and corresponding International Standard

Protective clothing—Mechanical properties—Test method for the determination of the resistance to puncture and dynamic tearing of materials

JIS T 8050: 2005

Introduction This Japanese Industrial Standard has been prepared based on the first edition of ISO 13995 Protective clothing—Mechanical properties—Test method for the determination of the resistance to puncture and dynamic tearing of materials published in 2000 with some modifications of the technical contents.

The portions underlined with dots are the matters modified from the original International Standard. A list of modifications with the explanations is given in Annex 1 (informative).

1 Scope This Standard specifies a test method for the determination of the resistance to puncture and dynamic tearing of protective clothing materials which are used in situations where snagging and tearing could result in unacceptable damage to the clothing or danger to the wearer through loss of integrity of a barrier. It is intended that the performance levels determined will be of use in specifying materials for use in situations where the risk of harm is related to the size of puncture and tear that may occur in accidents.

NOTE: The International Standard corresponding to this Standard is as follows.

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**.

ISO 13995:2000 Protective clothing—Mechanical properties—Test method for the determination of the resistance to puncture and dynamic tearing of materials (MOD)

2 Normative reference The following standard contains provisions which, through reference in this text, constitute provisions of this Standard. The most recent edition of the standard (including amendments) indicated below shall be applied.

JIS L 1096 Testing methods for woven fabrics

- **3 Terms and definitions** For the purposes of this Standard, the following terms and definitions apply:
- 3.1 test specimen mounting block a solid block of metal or plastic to which the test specimen is clamped for testing
- **3.2 tearing blade** a blunt blade projecting from the falling mass which punctures and tears the test specimen

NOTE: The hard steel tearing blade has a ground wedge shaped end that has a radius of curvature so that it is not sharp, but will puncture test materials. The main body of the blade is 3 mm thick and the lower surface is half