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Clothing for protection against liquid chemicals —
Determination of the resistance of protective clothing materials to penetration by liquids under pressure

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

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Foreword

This translation has been made based on the original Japanese Industrial Standard 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 the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14. Consequently JIS T 8031: 2005 has been replaced with this Standard.

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Clothing for protection against liquid chemicals— Determination of the resistance of protective clothing materials to penetration by liquids under pressure

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Introduction

This Japanese Industrial Standard has been prepared based on the second edition of ISO 13994 published in 2005 and Technical Corrigendum 1 of ISO 13994:2005 published in 2006 with some modifications of the technical contents considering the convenience of use.

The portions with continuous sidelines or dotted underlines in this Standard are the matters in which the contents of the original International Standard have been modified. A list of modifications with explanations is given in Annex JA.

1 Scope

This Standard describes a laboratory test method that enables determination of the resistance of materials used in protective clothing to visible penetration under the conditions of continuous liquid contact and pressure based on visual detection of liquid penetration.

This test method is used to evaluate the barrier effectiveness against liquids of materials used for protective clothing and specimens from finished items of protective clothing. An example of relevant clothing is the clothing that is exposed to repeated splashes of liquid spray under pressure.

NOTE 1 Finished items of protective clothing include not only the whole-body chemical protective clothing but also gloves, arm shields, aprons, suits, hoods, footwear and the like. Furthermore, the phrase "specimens from finished items" encompasses seamed and other discontinuous regions as well as the usual continuous regions of protective clothing items.

This test is used to identify protective clothing materials and certain material constructions (e.g. seams) that limit exposures to liquid chemicals. It does not address the design, construction and components, or interfaces of garments or other factors that may affect the overall protection offered by the protective clothing. Furthermore, this test does not necessarily simulate all the conditions in which clothing materials are likely to be exposed to liquid chemicals in practice. Therefore the use of test data should be restricted to broad comparative assessment of such materials according to their liquid penetration resistance characteristics.

NOTE 2 The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 13994: 2005 Clothing for protection against liquid chemicals — Determination of the resistance of protective clothing materials to penetration by liquids under pressure and Technical Corrigendum 1: 2006 (MOD)