

JIS

JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS T 8127 : 2020

(JSAA/JSA)

High visibility safety clothing

ICS 13.340.10

Reference number : **JIS T 8127 : 2020 (E)**

T 8127 : 2020

Date of Establishment: 2015-10-26

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 8127:2020, First English edition published in 2021-06

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 2021

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

HT/AT

PROTECTED BY COPYRIGHT

Contents

	Page
Introduction	1
1 Scope	1
2 Normative references	1
3 Terms and definitions	3
4 Design	5
4.1 Types and classes	5
4.2 Minimum design requirements	7
4.3 Size designation	13
5 Requirements for background material, non-fluorescent material and combined-performance material	14
5.1 Colour performance requirements of background material and combined- performance material	14
5.2 Colour performance requirements of background material and combined- performance material after Xenon test	14
5.3 Colour fastness of background material and all non-fluorescent material layers after test exposure	15
5.4 Dimensional change of background material and non-fluorescent material	16
5.5 Mechanical properties for background material and non-fluorescent material	16
5.6 Physiological performance—Water vapour resistance (R_{ct}) and thermal resistance (R_{ct})	16
6 Retroreflective performance requirements for retroreflective material and combined-performance material	17
6.1 Retroreflective performance requirements of new material	17
6.2 Retroreflective performance requirements after test exposure	18
7 Test methods	19
7.1 Sampling and conditioning	19
7.2 Determination of colour	19
7.3 Method of determination of retroreflective photometric performance	19
7.4 Retroreflective performance requirements after test exposure	20
7.5 Ageing	21
8 Marking	21
8.1 General	21
8.2 Specific	22
9 Information supplied by the manufacturer	23

Annex A (informative)	Factors related to the risk level, situation and environment of the user, such as the road etc., and examples of intended wearers	25
Annex B (normative)	Positioning of bands of retroreflective material on jackets for industrial wash test only	26
Annex C (normative)	Method of measuring wet retroreflective performance	27
Annex D (normative)	Guidelines for the design of high visibility safety garments	29
Annex JA (informative)	Guidelines for the area measurement of high visibility safety garments	30
Bibliography	39
Annex JB (informative)	Comparison table between JIS and corresponding International Standard	40

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 8127:2015**), 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.

High visibility safety clothing

Introduction

This Japanese Industrial Standard has been prepared based on **ISO 20471:2013**, Edition 1, and its Amendment 1:2016 with some modifications of the technical contents to increase the usability of this Standard. The amendment to the said International Standard has been incorporated into this Standard.

The vertical lines on both sides and dotted underlines indicate changes from the corresponding International Standard. A list of modifications with the explanations is given in Annex JB. Annex JA is unique to **JIS** and not given in the corresponding International Standard.

1 Scope

This Standard specifies requirements for high visibility safety clothing which is capable of visually signalling the user's presence. The high visibility safety clothing is intended to provide conspicuity of the wearer in any light condition when viewed by operators of moving bodies such as vehicles or construction machines (hereafter referred to as moving bodies) during daylight conditions and under illumination of headlights in the dark.

This Standard is not applicable to medium-risk and low-risk situations (see Annex A). Performance requirements are included for colour and retroreflection as well as for the minimum areas and for the placement of the materials in protective clothing.

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

ISO 20471:2013 *High visibility clothing—Test methods and requirements* and Amendment 1:2016 (MOD)

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

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. For standards with the year indication, only the editions of the indicated year shall be applied and the revisions (including amendments) made thereafter shall not be applied. For those without the indication of the year, the most recent editions (including amendments) shall be applied.

JIS K 6404-2 *Testing methods for rubber- or plastics-coated fabrics—Part 2: Determination of basic physical properties*

NOTE Corresponding International Standard: ISO 1421 *Rubber- or plastics-coated fabrics—Determination of tensile strength and elongation at break* and ISO 4674-1 *Rubber- or plastics-coated fabrics—Determination of tear resistance—Part 1: Constant rate of tear methods*