

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 105/II

TESTS FOR
COLOUR FASTNESS OF TEXTILES
SECOND SERIES

1st EDITION
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BRIEF HISTORY

The ISO Recommendation R 105/II, *Tests for Colour Fastness of Textiles—Second Series*, was drawn up by Technical Committee ISO/TC 38, *Textiles*, the Secretariat of which is held by the British Standards Institution (B.S.I.).

Work on this question by the Technical Committee began in 1954 and led, in 1956, to the adoption of a Draft ISO Recommendation.

In January 1960, this Draft ISO Recommendation (No. 322) was circulated to all the ISO Member Bodies for enquiry. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies:

Australia	France	Portugal
Belgium	Germany	Romania
Bulgaria	Ireland	Spain
Burma	Italy	Sweden
Chile	Japan	Switzerland
Colombia	Netherlands	Turkey
Denmark	New Zealand	United Kingdom

Three Member Bodies opposed the approval of the Draft:

Hungary, India, U.S.S.R.

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in March 1963, to accept it as an ISO RECOMMENDATION.

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TESTS FOR COLOUR FASTNESS OF TEXTILES SECOND SERIES

Part 1

COLOUR FASTNESS TO ALKALINE MILLING

1. PURPOSE AND SCOPE

- 1.1 This method is intended for assessing the resistance of the colour of wool and part wool textiles to the action of soap and sodium carbonate solutions used in alkaline milling.

2. PRINCIPLE

- 2.1 A specimen of the textile in contact with specified undyed cloths is milled in a jar containing stainless steel balls and a solution of soap and sodium carbonate. The severity of the action is standardized by means of a test-control dyeing milled in the same way. The change in colour of the specimen and the staining of undyed cloths are assessed with standard grey scales.

3. APPARATUS AND REAGENTS

- 3.1 Suitable container with means of agitation.*
- 3.2 Non-corrodible (stainless) steel balls, 6 mm in diameter.
- 3.3 Two undyed cloths, each 10 cm × 4 cm, one piece made of the same kind of fibre as that of the textile to be tested or that predominating in the case of blends, and the second made of the fibre indicated in the table below or of another fibre to be assessed for staining.

If first piece is:	Second piece to be:
cotton	wool
wool	cotton
linen	wool
viscose	wool
acetate	wool
polyamide	wool
polyester	wool
polyacrylic	wool

- 3.4 Solution containing 50 g soap and 10 g anhydrous sodium carbonate per litre. The soap should contain not more than 5 per cent moisture and comply with the following specifications based upon dry weight:

Free alkali, calculated as Na_2CO_3	0.3 per cent maximum
Free alkali, calculated as NaOH	0.1 per cent maximum
Total fatty matter	85 per cent minimum
Titre of mixed fatty acids prepared from the soap	30 °C maximum
Iodine value	50 maximum

- 3.5 **Test control.** A dyeing of 3 per cent Disulphine Blue ANS on wool cloth (see clause 7.1).

* The Wash Wheel, sponsored by the Society of Dyers and Colourists, and the "Launder-Ometer", sponsored by the American Association of Textile Chemists and Colourists and equipped with metal specimen containers, or other mechanical apparatus giving identical results, may be used for the test.