

INTERNATIONAL
STANDARD

ISO
2115

Third edition
1996-02-15

**Plastics — Polymer dispersions —
Determination of white point temperature
and minimum film-forming temperature**

*Plastiques — Dispersions de polymères — Détermination de la
température de point blanc et de la température minimale de la formation
de film*

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Reference number
ISO 2115:1996(E)

Foreword

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Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 2115 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 9, *Thermoplastic materials*, in close collaboration with ISO/TC 35, *Paints and varnishes*.

This third edition cancels and replaces the second edition (ISO 2115:1976), which has been extended and harmonized, taking account of the requirements of ISO/TC 35, *Paints and varnishes*.

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Plastics — Polymer dispersions — Determination of white point temperature and minimum film-forming temperature

1 Scope

This International Standard specifies a method for the determination of the “white point” temperature and the minimum film-forming temperature of polymer dispersions.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 123:1985, *Rubber latex — Sampling*.

ISO 842:—¹⁾, *Raw materials for paints and varnishes — Sampling*.

ISO 12000:—²⁾, *Plastics/rubber — Polymer dispersions and rubber latices (natural and synthetic) — Definitions and review of test methods*.

3 Definitions

For the purposes of this International Standard, the following definitions apply.

3.1 polymer dispersion: Polymeric material finely dispersed in a liquid phase, which is usually water. During drying, the liquid evaporates and as a result the tiny particles are forced closer together until they touch each other.

Depending on the type of polymer, the temperature and the possible influence of any auxiliaries present, the particles — when spread out in a thin layer on a substrate — interact to form

either

— a discontinuous opaque white mass in which the polymer particles are not fused together if the temperature is insufficient to allow coalescence of the particles;

or

— a continuous transparent layer in which the particles combine to form a homogeneous film if the temperature conditions are sufficient to allow coalescence of the particles.

NOTE 1 Coalescence means uniting of particles at least partly by interpenetration of the polymer chains.

3.2 white point temperature: The temperature limit below which an opaque mass, and above which a transparent film, is formed.

3.3 minimum film-forming temperature: The temperature limit above which a continuous homogeneous film without cracks is observed.

NOTE 2 The white point temperature always lies a few degrees Celsius below the minimum film-forming temperature.

1) To be published. (Revision of ISO 842:1984)

2) To be published.