
**Thermoplastics pipes — Longitudinal
reversion — Test method and
parameters**

*Tubes en matières thermoplastiques — Retrait longitudinal à chaud
— Méthode d'essai et paramètres*

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 138, *Plastics pipes, fittings and valves for the transport of fluids*, Subcommittee SC 5, *General properties of pipes, fittings and valves of plastic materials and their accessories — Test methods and basic specifications*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 155, *Plastic piping systems and ducting systems*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This fourth edition cancels and replaces the third edition (ISO 2505:2005), which has been technically revised.

The main changes are as follows:

- the following materials and their respective test requirements have been added: PE 100-RC, PB-H, PB-R, PE-RT, PP-RCT and PE-UHMW;
- a requirement has been added stating that small diameter pipes from coils are to be straightened prior to testing.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Thermoplastics pipes — Longitudinal reversion — Test method and parameters

1 Scope

This document specifies a method for determining the longitudinal reversion of thermoplastics pipes, to be carried out in either a liquid or in air. In case of dispute, heated liquid is used as the reference.

This document is applicable to all thermoplastics pipes with smooth internal and external walls of constant cross-section. It is not applicable to non-smooth structured-wall thermoplastics pipes.

The parameters appropriate to the pipe material and recommendations for the maximum levels of reversion as a function of the pipe material are given in [Annex A](#).

This method is applicable for pipes of wall thickness ≤ 16 mm.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 1043-1, *Plastics — Symbols and abbreviated terms — Part 1: Basic polymers and their special characteristics*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

4 Abbreviated terms

For the purposes of this document, the abbreviated terms used for the plastic materials given in ISO 1043-1 and the following apply.

ABS	acrylonitrile/butadiene/styrene
ASA	acrylonitrile/styrene/acrylate
MRS	minimum required strength
PA-U	unplasticized polyamide
PB-H	polybutene homopolymer
PB-R	polybutylene random copolymer
PE 32/40	polyethylene MRS 3,2/4