

Thermoplastic elastomers - Nomenclature and
abbreviated terms

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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English Version

Thermoplastic elastomers - Nomenclature and abbreviated terms (ISO 18064:2014)

Élastomères thermoplastiques - Nomenclature et termes abrégés (ISO 18064:2014)

Thermoplastische Elastomere - Nomenklatur und Kurzzeichen (ISO 18064:2014)

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Foreword

This document (EN ISO 18064:2014) has been prepared by Technical Committee ISO/TC 45 "Rubber and rubber products" in collaboration Technical Committee CEN/TC 249 "Plastics" the secretariat of which is held by NBN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2015, and conflicting national standards shall be withdrawn at the latest by June 2015.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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Endorsement notice

The text of ISO 18064:2014 has been approved by CEN as EN ISO 18064:2014 without any modification.

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Introduction

Thermoplastic elastomers combine many of the attributes and features of both vulcanized thermoset rubber and thermoplastic materials. It is, therefore, important that any system of classification and nomenclature for this rapidly expanding polymer sector should be acceptable to both the rubber and plastics industries. Neither of the existing International Standards for the nomenclature and abbreviated terms for rubber (ISO 1629) and for plastics (ISO 1043-1) is suitable for this purpose. The system in this International Standard has been devised to avoid any conflict of interests or ambiguity, permit the use of existing terms in the construction of abbreviations for thermoplastic elastomers, and allow for future developments or expansion.

This International Standard uses established abbreviated terms. Its aim is both to prevent the occurrence of more than one abbreviated term for a given thermoplastic elastomer term, and to prevent the interpretation of more than one meaning for a given abbreviated term. For this reason, this International Standard makes appropriate use of the terms and symbols listed in ISO 1043-1 and ISO 1629.

Thermoplastic elastomers — Nomenclature and abbreviated terms

1 Scope

This International Standard establishes a nomenclature system for thermoplastic elastomers based on the chemical composition of the polymer or polymers involved. It defines symbols and abbreviated terms used to identify thermoplastic elastomers in industry, commerce, and government. It is not intended to conflict with, but to supplement, existing trade names and trademarks.

NOTE 1 The name of the thermoplastic elastomer should be used in technical papers and presentations followed by the abbreviated term used to designate the elastomer in this International Standard.

NOTE 2 [Annex A](#) gives thermoplastic-elastomer abbreviated terms that have been used in the past in materials standards, technical bulletins, textbooks, patents, and trade literature.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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*

ISO 1629, *Rubber and latices — Nomenclature*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

thermoplastic elastomer

TPE

polymer or blend of polymers that has properties at its service temperature similar to those of vulcanized rubber but can be processed and reprocessed at elevated temperature like a thermoplastic

Note 1 to entry: Thermoplastic rubber is a commonly used term for thermoplastic elastomer.

4 Nomenclature system

4.1 The prefix TP is used to indicate that the abbreviated term is for a thermoplastic elastomer and shall be followed by a letter representing each category of thermoplastic elastomer, as detailed in [Clause 5](#).

4.2 The abbreviated term for each category of thermoplastic elastomer shall be followed, after a hyphen, by a combination of symbols to describe a specific member of each category, as detailed in [Clause 6](#).