



**International
Standard**

ISO 16365-1

**Plastics — Thermoplastic
polyurethanes for moulding and
extrusion —**

**Part 1:
Designation system and basis for
specifications**

*Plastiques — Polyuréthannes thermoplastiques pour moulage et
extrusion —*

Partie 1: Système de désignation et base de spécifications

**Second edition
2025-02**

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Foreword

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This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 9, *Thermoplastic materials*.

This second edition cancels and replaces the first edition (ISO 16365-1:2014), which has been technically revised.

The main changes are as follows:

— the range of hardness Shore A in [Table 4](#) has been modified.

A list of all parts in the ISO 16365 series can be found on the ISO website.

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.

Introduction

This document is based on the ISO 1043 series and ISO 11469.

The types of thermoplastic polyurethane are differentiated from each other by a classification system based on appropriate levels of the designatory properties:

- a) hardness;
- b) tensile modulus of elasticity (optional);

and on information about the alternating hard and soft segments in the main chain, the intended application and/or method of processing, important properties, additives, colour, fillers and reinforcing materials.

In order to specify a thermoplastic elastomer for a particular application or reproducible processing, additional requirements are given in data block 5 (see [4.1](#) and [4.6](#)).

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