

# DIN 78006-2:2022-08 (E)

## Plastics - Thermoplastic polyurethanes for moulding and extrusion - Part 2: Preparation of test specimens and determination of properties

---

<b>Contents</b>		<b>Page</b>
Foreword .....		3
Introduction .....		4
1	Scope .....	5
2	Normative references .....	5
3	Terms and definitions .....	5
4	Test specimens .....	6
4.1	General .....	6
4.2	Conditioning of material before injection moulding .....	6
4.3	Test specimen preparation .....	6
5	Determination of properties .....	7
5.1	General .....	7
5.2	Shore hardness measurement .....	8
5.3	Modulus of elasticity measurement .....	8
5.4	Tensile test .....	8
5.5	Tear strength .....	8
5.6	Compression set .....	9
Annex A (informative)	Description and determination of important standard properties and other properties .....	10
A.1	General .....	10
A.2	Dynamic mechanical analysis (DMA) .....	10
A.3	Differential scanning calorimetry (DSC) .....	10
A.4	Determination of adhesion as in VDI 2019 .....	11
A.5	Determination of flow properties .....	11
Bibliography .....		12
Tables	Table 1 -- Classification of thermoplastic elastomers -- TPU based on their hardness/stiffness (see Clause 5 for standard properties) .....	4
	Table 2 -- Overview of basic properties for the characterization of thermoplastic polyurethanes .....	7
	Table 3 -- Overview of mechanical properties for the characterization of thermoplastic polyurethanes .....	8