

# ISO 14631:2021 (E)

## Extruded sheets of impact-modified polystyrene (PS-I) — Requirements and test methods

---

### Contents

	Foreword
1	Scope
2	Normative references
3	Terms and definitions
4	Material
5	Requirements
5.1	Appearance
5.2	Dimensional tolerances
5.2.1	Thickness
5.2.2	Length and width
5.2.3	Rectangularity
5.2.4	Bow of sheets in rolled form
5.3	Properties
5.3.1	General
5.3.2	Mechanical and thermal properties
5.3.3	Behaviour after heating
5.3.4	Physiological behaviour
6	Test methods
6.1	Test specimens
6.1.1	Preparation of test specimens
6.1.2	Conditioning
6.1.3	Testing
6.2	Delivery condition
6.3	Appearance
6.4	Dimensions
6.4.1	Thickness (h)
6.4.2	Length (l) and width (b)
6.4.3	Rectangularity
6.4.4	Bow of sheets in rolled form
6.5	Density
6.6	Mechanical properties
6.6.1	Tensile stress at yield ( $\sigma_Y$ )
6.6.2	Nominal tensile strain at break ( $\epsilon_t B$ )
6.6.3	Modulus of elasticity in tension ( $E_t$ )
6.6.4	Charpy impact strength of unnotched specimens (acU)
6.6.5	Charpy impact strength of notched specimens (acN)
6.6.6	Multiaxial impact strength
6.6.7	Ball indentation hardness
6.7	Thermal properties
6.7.1	Vicat softening temperature
6.7.2	Determination of shrinkage after heating
7	Designation
7.1	Example for PS-I-sheets
7.2	Example for PS-I sheets in roll form
8	Marking
Annex A	(informative) Additional guide values