

---

---

**Plastics — Impact-resistant polystyrene  
(PS-I) moulding and extrusion materials —**

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

*Plastiques — Polystyrènes résistants au choc (PS-I) pour moulage et  
extrusion —*

*Partie 1: Système de désignation et base de spécification*



## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 2897-1 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 9, *Thermoplastic materials*.

This second edition cancels and replaces the first edition (ISO 2897-1:1990), the text of which has been brought into accordance with the standard SC 9 frame text.

ISO 2897 consists of the following parts, under the general title *Plastics — Impact-resistant polystyrene (PS-I) moulding and extrusion materials*:

- *Part 1: Designation system and basis for specifications*
- *Part 2: Preparation of test specimens and determination of properties*

© ISO 1997

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization  
Case postale 56 • CH-1211 Genève 20 • Switzerland  
Internet central@isocs.iso.ch  
X.400 c=ch; a=400net; p=iso; o=isocs; s=central

Printed in Switzerland

# Plastics — Impact-resistant polystyrene (PS-I) moulding and extrusion materials —

## Part 1: Designation system and basis for specifications

### 1 Scope

**1.1** This part of ISO 2897 establishes a system of designation for impact-resistant polystyrene (PS-I) thermoplastic materials, which may be used as the basis for specifications.

**1.2** The types of impact-resistant polystyrene plastic are differentiated from each other by a classification system based on appropriate levels of the designatory properties

- a) Vicat softening temperature
- b) melt flow rate
- c) Izod impact strength
- d) flexural modulus

and on information about the intended application and/or method of processing, important properties, additives and colourants.

**1.3** This part of ISO 2897 is applicable to all impact-resistant polystyrene plastics with a two-phase polymer system comprised of a continuous phase, consisting of polystyrene and/or a copolymer of styrene with an alkyl-substituted styrene, and a dispersed elastomeric phase based on butadiene.

It applies to materials ready for normal use, unmodified or modified by colourants, additives, fillers, etc.

This part of ISO 2897 does not apply to expandable materials.

**1.4** It is not intended to imply that materials having the same designation give necessarily the same performance. This part of ISO 2897 does not provide engineering data, performance data or data on processing conditions which may be required to specify a material for a particular application and/or method of processing.

If such additional properties are required, they shall be determined in accordance with the test methods specified in part 2 of this International Standard, if suitable.