

# DIN EN ISO 6603-2:2023-11 (E)

## Plastics - Determination of puncture impact behaviour of rigid plastics - Part 2: Instrumented impact testing (ISO 6603-2:2023)

---

Contents	Page
European foreword .....	3
Foreword .....	4
1 Scope .....	5
2 Normative references .....	5
3 Terms and definitions .....	6
4 Principle .....	11
5 Apparatus .....	11
6 Test specimens .....	15
6.1 Shape and dimensions .....	15
6.2 Preparation of test specimens .....	15
6.3 Non-homogeneous test specimens .....	16
6.4 Checking the test specimens .....	16
6.5 Number of test specimens .....	16
6.6 Conditioning of test specimens .....	16
6.7 Pre-cooling .....	16
7 Procedure .....	17
7.1 Test atmosphere .....	17
7.1.1 General .....	17
7.1.2 Ambient temperature testing .....	17
7.1.3 Low temperature testing .....	17
7.2 Measurement of thickness .....	17
7.3 Clamping the test specimen .....	17
7.4 Lubrication .....	17
7.5 Puncture test procedure .....	18
8 Calculations .....	18
8.1 Expression of results .....	18
8.2 Calculation of deflection .....	18
8.3 Calculation of energy .....	19
8.4 Statistical parameters .....	19
8.5 Significant figures .....	20
9 Precision .....	20
10 Test report .....	20
Annex A (informative) Interpretation of complex force-deflection curves .....	22
Annex B (informative) Friction between striker and specimen .....	25
Annex C (informative) Clamping of specimens .....	28
Annex D (informative) Tough/brittle transitions .....	29
Annex E (informative) Influence of specimen thickness .....	30
Annex F (informative) Guidance for the classification of the type of failure .....	32
Annex G (informative) Precision data .....	37
Bibliography .....	39