

ISO 6603-2:2023-06 (E)

Plastics - Determination of puncture impact behaviour of rigid plastics - Part 2: Instrumented impact testing

Contents		Page
Foreword		iv
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	Principle	7
5	Apparatus	7
6	Test specimens	11
6.1	Shape and dimensions	11
6.2	Preparation of test specimens	11
6.3	Non-homogeneous test specimens	12
6.4	Checking the test specimens	12
6.5	Number of test specimens	12
6.6	Conditioning of test specimens	12
6.7	Pre-cooling	12
7	Procedure	13
7.1	Test atmosphere	13
7.1.1	General	13
7.1.2	Ambient temperature testing	13
7.1.3	Low temperature testing	13
7.2	Measurement of thickness	13
7.3	Clamping the test specimen	13
7.4	Lubrication	13
7.5	Puncture test procedure	14
8	Calculations	14
8.1	Expression of results	14
8.2	Calculation of deflection	14
8.3	Calculation of energy	15
8.4	Statistical parameters	15
8.5	Significant figures	16
9	Precision	16
10	Test report	16
Annex A (informative) Interpretation of complex force-deflection curves		18
Annex B (informative) Friction between striker and specimen		21
Annex C (informative) Clamping of specimens		24
Annex D (informative) Tough/brittle transitions		25
Annex E (informative) Influence of specimen thickness		26
Annex F (informative) Guidance for the classification of the type of failure		28
Annex G (informative) Precision data		33
Bibliography		35