

ISO 13586:2018 (E)

Plastics — Determination of fracture toughness (GIC and KIC) — Linear elastic fracture mechanics (LEFM) approach

Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Test specimens
4.1	Shape and size
4.2	Preparation
4.3	Notching
4.4	Conditioning
5	Testing
5.1	Testing machine
5.2	Load indicator
5.3	Displacement transducer
5.4	Loading rigs
5.5	Displacement correction
5.6	Test atmosphere
5.7	Thickness, width and crack length of test specimens
5.8	Test conditions
6	Expression of results
6.1	Determination of FQ
6.2	Provisional result GQ
6.3	Provisional result KQ
6.4	Size criteria and validation of results
6.5	Cross-check of results
7	Precision
8	Test report
Annex A	(normative) Calibration factors
Annex B	(informative) Testing of plastics containing short fibres
B.1	General
B.2	Test specimens
B.2.1	Shape and size
B.2.2	Configuration
B.2.3	Notching
B.3	Identification of fracture initiation
B.4	Size criteria and validation of results

Page count: 22