
**Plastics — Determination of fracture
toughness (G_{IC} and K_{IC}) — Linear
elastic fracture mechanics (LEFM)
approach**

*Plastiques — Détermination de la ténacité à la rupture (G_{IC} et K_{IC}) —
Application de la mécanique linéaire élastique de la rupture (LEFM)*

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

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Foreword

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This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 2, *Mechanical behaviour*.

This second edition cancels and replaces the first edition (ISO 13586:2000), which has been technically revised. It also incorporates the Amendment ISO 13586:2000/Amd.1:2003, with the introduction of a new [Annex B](#).

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document is based on a testing protocol developed by the European Structural Integrity Society (ESIS), Technical Committee 4, *Polymers, Polymer Composites and Adhesives*, who carried out the preliminary enabling research through a series of round-robin exercises which covered a range of material samples, specimen geometries, test instruments and operational conditions. This activity involved nearly 10 laboratories from different countries. See References [1] and [3].

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