



ISO 7765-2

**Plastics film and sheeting —
Determination of impact resistance
by the free-falling dart method —**

**Part 2:
Instrumented puncture test**

Film et feuille de plastiques — Détermination de la résistance au choc par la méthode par chute libre de projectile —

Partie 2: Essai avec appareil de perforation

**Third edition
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This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 11, *Products*.

The third edition cancels and replaces the second edition (ISO 7765-2:2022), which has been technically revised.

The main changes were as follows:

- the normative references have been updated;
- corrections of the following errors:
 - the total penetration energy definition (see [3.4](#));
 - minimum sample frequency value (see [5.3.2](#)).

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The impact-penetration test described in the ISO 7765 series is used for the assessment of plastic films and thin sheets (hereinafter referred to as films) under an impact stress applied at right angles to the plane of the film.

ISO 7765-1 can be used if it is sufficient to characterize the impact behaviour of the film by an impact failure energy. This document is used if a force-deformation or a force-time diagram, recorded at practically constant velocity of the striker, is necessary for characterization of the impact behaviour.

[Annex A](#) gives general remarks and is for information only.