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Third edition  
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# Plastics — Determination of temperature of deflection under load —

## Part 2: Plastics and ebonite

*Plastiques — Détermination de la température de fléchissement  
sous charge —*

*Partie 2: Plastiques et ébonite*



Reference number  
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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 75-2 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 2, *Mechanical properties*.

This third edition cancels and replaces the second edition (ISO 75-2:2004), which has been technically revised. In particular, [Clause 5](#) and [Annex A](#) have been updated.

ISO 75 consists of the following parts, under the general title *Plastics — Determination of temperature of deflection under load*:

- *Part 1: General test method*
- *Part 2: Plastics and ebonite*
- *Part 3: High-strength thermosetting laminates and long-fibre-reinforced plastics*

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## Introduction

The first editions of ISO 75-1 and this part of ISO 75 described three methods (A, B and C) using different test loads and two specimen positions, edgewise and flatwise. For testing in the flatwise position, test specimens with dimensions 80 mm × 10 mm × 4 mm were required. These can be moulded directly or machined from the central section of the multipurpose test specimen (see ISO 20753).

The previous (i.e. second) editions of ISO 75-1 and this part of ISO 75 specified the flatwise test position as preferred, while still allowing testing in the edgewise position with test conditions given in [Annex A](#) until the next revision of ISO 75-1 and this part of ISO 75, as agreed in ISO/TC 61/SC2/WG 5. Therefore, with this revision, the edgewise test position will be removed.

Technical development of testing instruments in recent years made instruments based on a fluidized bed or air ovens available. These are especially advantageous for use at temperatures at which the common silicone oil-based heat transfer fluids reach their limit of thermal stability. The fluidized bed and air oven methods of heat transfer are introduced in ISO 75-1.

An additional precision statement covering the new heating methods is introduced in this part of ISO 75.