

INTERNATIONAL STANDARD

ISO 62

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Plastics — Determination of water absorption

Plastiques — Détermination de l'absorption d'eau



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Foreword

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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.

International Standard ISO 62 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 6, *Ageing, chemical and environmental resistance*.

This second edition cancels and replaces the first edition (ISO 62:1980), of which it constitutes a technical revision.

Annexes A and B of this International Standard are for information only.

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International Organization for Standardization
Case postale 56 • CH-1211 Genève 20 • Switzerland
Internet iso@iso.ch

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Introduction

Plastics exposed to water are subject to several different effects:

- a) dimensional changes (e.g. swelling) caused by absorption of water;
- b) extraction of water-soluble components; and
- c) changes in other properties.

However, exposure to humidity, immersion, and exposure to boiling water can result in distinctly different material responses. The equilibrium moisture content can be used to compare the amount of water absorbed by different types of plastics when they are exposed to moisture. Moisture content determined under non-equilibrium conditions can be used to compare different batches of the same material and to determine the diffusion constant of the material when determined under carefully controlled non-equilibrium exposure conditions to moisture and when using plastic specimens of defined dimensions.