



DRAFT TANZANIA STANDARD

Plastics - Determination of water absorption

For public comments only

TANZANIA BUREAU OF STANDARDS

0. National foreword

This draft Tanzania Standard is identical to *ISO 62:2008, Plastics -Determination of water absorption* (Confirmed in 2021), published by the International Organization for Standardization (ISO).

Some terminologies and certain conventions used in International Standards are not identical with those used in Tanzania standards and attention is drawn especially to the following:

The comma has been used as a decimal marker for metric dimensions. In Tanzania, it is current practice to use a “full point” on the baseline as the decimal marker.

Wherever the words “International Standard” appear, referring to this document, they should read as “Tanzania Standard”.

1. SCOPE

This International Standard describes a procedure for determining the moisture absorption properties in the “through-the-thickness” direction of flat or curved-form solid plastics. This International Standard also describes procedures for determining the amount of water absorbed by plastic specimens of defined dimensions, when immersed in water or when subjected to humid air under controlled conditions. The “through-the-thickness” moisture diffusion coefficient can be determined for single-phase material by assuming Fickian diffusion behaviour with constant moisture absorption properties through the thickness of the test specimen. This model is valid for homogeneous materials and for reinforced polymer-matrix composites tested below their glass transition temperature. However, some two-phase matrices such as hardened epoxies may require a multi-phase absorption model which is not covered by this International Standard.