

INTERNATIONAL STANDARD



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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Phthalic anhydride for industrial use — Methods of test — Part VIII : Determination of ash

*Anhydride phtalique à usage industriel — Méthodes d'essai —
Partie VIII : Détermination des cendres*

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Price based on 2 pages

FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been set up 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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

Prior to 1972, the results of the work of the technical committees were published as ISO Recommendations; these documents are in the process of being transformed into International Standards. As part of this process, Technical Committee ISO/TC 47, *Chemistry*, has reviewed ISO Recommendation R 1389-1970 and found it technically suitable for transformation. The technical committee, however, divided the recommendation into eleven parts (ISO 1389, parts I to XI), which therefore replace ISO Recommendation R 1389-1970, to which they are technically identical.

ISO Recommendation R 1389 had been approved by the member bodies of the following countries :

Austria	India	South Africa, Rep. of
Belgium	Iran	Spain
Brazil	Ireland	Sweden
Cuba	Italy	Switzerland
Czechoslovakia	Korea, Rep. of	Thailand
Egypt, Arab Rep. of	Netherlands	Turkey
France	New Zealand	United Kingdom
Germany	Portugal	
Hungary	Romania	

No member body had expressed disapproval of the Recommendation.

The member bodies of the following countries disapproved the transformation of the Recommendation into an International Standard :

France
Netherlands

Phthalic anhydride for industrial use – Methods of test – Part VIII : Determination of ash

1 SCOPE AND FIELD OF APPLICATION

This part of ISO 1389 specifies a method for the determination of ash of phthalic anhydride for industrial use.

This document should be read in conjunction with part I (see the annex).

2 PRINCIPLE

Burning of a test portion and heating at $600 \pm 30^\circ\text{C}$ to constant mass.

3 APPARATUS

Ordinary laboratory apparatus and

3.1 Platinum or silica dish.

3.2 Electric furnace, capable of being controlled at $600 \pm 30^\circ\text{C}$.

4 PROCEDURE

In the dish (3.1), previously heated at $600 \pm 30^\circ\text{C}$, cooled in a desiccator and weighed to the nearest 0,000 1 g, slowly burn, in several portions, approximately 50 g, weighed to the nearest 1 g, of the test sample. Heat in the furnace (3.2), controlled at $600 \pm 30^\circ\text{C}$, until all carbonaceous matter has disappeared. Allow to cool in a desiccator and weigh to the nearest 0,000 1 g. Repeat the operations of heating, cooling, and weighing until the difference in mass between two successive weighings does not exceed 0,000 5 g.

Retain the residue for the determination of iron, if required, as described in part XI.

5 EXPRESSION OF RESULTS

The ash, expressed as a percentage by mass, is given by the formula

$$\frac{100 m_1}{m_0}$$

where

m_0 is the mass, in grams, of the test portion;

m_1 is the mass, in grams, of the residue.

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ANNEX

ISO PUBLICATIONS RELATING TO PHTHALIC ANHYDRIDE FOR INDUSTRIAL USE

ISO 1389/I – General.

ISO 1389/II – Measurement of colour of molten material.

ISO 1389/III – Measurement of colour stability.

ISO 1389/IV – Measurement of colour after treatment with sulphuric acid.

ISO 1389/V – Determination of free acidity – Potentiometric method.

ISO 1389/VI – Determination of phthalic anhydride content – Titrimetric method.

ISO 1389/VII – Determination of maleic anhydride content – Polarographic method.

ISO 1389/VIII – Determination of ash.

ISO 1389/IX – Determination of impurities oxidizable in the cold by potassium permanganate – Iodometric method.

ISO 1389/X – Determination of 1,4-naphthaquinone content – Colorimetric method.

ISO 1389/XI – Determination of iron content – 2,2'-Bipyridyl photometric method.