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INTERNATIONAL STANDARD



1843 / VI

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## Higher alcohols for industrial use — Methods of test — Part VI : Determination of ash

*Alcools supérieurs à usage industriel — Méthodes d'essai —  
Partie VI : Détermination des cendres*

First edition — 1977-05-15

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**Descriptors** : alcohols, chemical analysis, determination, colouring, colorimetric analysis, visual inspection.

## 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 1851-1970 and found it technically suitable for transformation. Number 1851, however, has been changed to 1843/VI. International Standard ISO 1843/VI therefore replaces ISO Recommendation R 1851-1970, to which it is technically identical.

ISO Recommendation R 1851 had been approved by the member bodies of the following countries :

Australia	Hungary	Romania
Austria	India	South Africa, Rep. of
Belgium	Iran	Spain
Brazil	Israel	Switzerland
Czechoslovakia	Italy	Turkey
Egypt, Arab Rep. of	Netherlands	United Kingdom
France	Peru	U.S.S.R.
Germany	Poland	
Greece	Portugal	

No member body had expressed disapproval of the Recommendation.

The member body of the following country disapproved the transformation of the Recommendation into an International Standard :

Netherlands

# Higher alcohols for industrial use – Methods of test – Part VI : Determination of ash

## 1 SCOPE AND FIELD OF APPLICATION

This part of ISO 1843 specifies a method for the determination of ash, applicable to C<sub>6</sub> to C<sub>13</sub> alcohols 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 ± 30 °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 ± 30 °C.

## 4 PROCEDURE

### 4.1 Test portion

Weigh, to the nearest 0,1 g, about 50 g of the laboratory sample.

## 4.2 Determination

In the dish (3.1), previously heated at 600 ± 30 °C, cooled in a desiccator and weighed to the nearest 0,000 1 g, slowly burn the test portion (4.1) in several portions. Heat finally in the furnace (3.2), controlled at 600 ± 30 °C, until all the 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.

## 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 (4.1);

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

## ANNEX

### ISO PUBLICATIONS RELATING TO HIGHER ALCOHOLS FOR INDUSTRIAL USE

ISO 1843/I – General.

ISO 1843/II – Determination of acidity to phenolphthalein – Titrimetric method.

ISO 1843/III – Determination of carbonyl compounds content – Potentiometric method.

ISO 1843/IV – Determination of bromine number – Titrimetric method in the presence of mercury(II) chloride.

ISO 1843/V – Determination of total alcohols content.

ISO 1843/VI – Determination of ash.

ISO/R 1845 – Determination of distillation yield.

ISO/R 1852 – Test for colour with sulphuric acid.