
International Standard



1388/6

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**Ethanol for industrial use — Methods of test —
Part 6 : Test for miscibility with water**

Éthanol à usage industriel — Méthodes d'essai — Partie 6 : Essai de miscibilité à l'eau

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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.

International Standard ISO 1388/6 was developed by Technical Committee ISO/TC 47, *Chemistry*, and was circulated to the member bodies in February 1980.

It has been approved by the member bodies of the following countries :

Australia	Germany, F.R.	Romania
Austria	Hungary	South Africa, Rep. of
Belgium	India	Switzerland
Brazil	Italy	Thailand
Bulgaria	Korea, Rep. of	United Kingdom
China	Netherlands	USSR
Czechoslovakia	Philippines	
France	Poland	

No member body expressed disapproval of the document.

International Standards ISO 1388/1 to ISO 1388/12 cancel and replace ISO Recommendation R 1388-1970, of which they constitute a technical revision.

Ethanol for industrial use — Methods of test — Part 6 : Test for miscibility with water

1 Scope and field of application

This part of ISO 1388 specifies a test for miscibility with water of ethanol for industrial use.

This document should be read in conjunction with ISO 1388/1 (see the annex).

2 Principle

Addition of water to a test portion, under specified conditions, and examination for opalescence.

3 Reagent

During the test, use only distilled water or water of equivalent purity.

4 Apparatus

Ordinary laboratory apparatus, and

4.1 Two matched Nessler cylinders, of capacity 100 ml.

5 Procedure

5.1 Test portion

Take 5 ml of the laboratory sample or a different volume agreed between the interested parties.

5.2 Test

Place the test portion (5.1) in one of the Nessler cylinders (4.1), and dilute with water to the 100 ml mark. Mix and adjust the temperature to about 20 °C. Place 100 ml of water in the other Nessler cylinder.

Examine the cylinder containing the test solution vertically for opalescence, against a black background with side illumination, using the second Nessler cylinder containing water as the standard.

6 Expression of results

Report the dilution-ratio of the test portion and the presence or absence of opalescence.

Annex

ISO Publications relating to ethanol for industrial use

ISO 1388/1 — General.

ISO 1388/2 — Detection of alkalinity or determination of acidity to phenolphthalein.

ISO 1388/3 — Estimation of content of carbonyl compounds present in small amounts — Photometric method.

ISO 1388/4 — Estimation of content of carbonyl compounds present in moderate amounts — Titrimetric method.

ISO 1388/5 — Determination of aldehydes content — Visual colorimetric method.

ISO 1388/6 — Test for miscibility with water.

ISO 1388/7 — Determination of methanol content [methanol contents between 0,01 and 0,20 % (V/V)] — Photometric method.

ISO 1388/8 — Determination of methanol content [methanol contents between 0,10 and 1,50 % (V/V)] — Visual colorimetric method.

ISO 1388/9 — Determination of esters content — Titrimetric method after saponification.

ISO 1388/10 — Estimation of hydrocarbons content — Distillation method.

ISO 1388/11 — Test for detection of furfural.

ISO 1388/12 — Determination of permanganate time.
