

International Standard



1387

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Methanol for industrial use — Methods of test

Méthanol à usage industriel — Méthodes d'essai

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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 1387 was developed by Technical Committee ISO/TC 47, *Chemistry*. It results from the combination into one single document of parts 1 to 7 of draft International Standard ISO/DIS 1387, which were circulated to the member bodies in December 1980.

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

Austria	India	Poland
Belgium	Ireland*	Portugal
China	Italy	Romania
Czechoslovakia	Korea, Dem. P. Rep. of	South Africa, Rep. of
Egypt, Arab Rep. of	Korea, Rep. of	Switzerland
France	Mexico	Thailand
Germany, F.R.	Netherlands**	United Kingdom***
Hungary	Philippines	USSR

This International Standard has also been approved by the International Union of Pure and Applied Chemistry (IUPAC).

It cancels and replaces ISO Recommendation R 1387-1970, of which it constitutes a technical revision.

* Ireland did not vote on clause 10 (formerly part 2)

** The Netherlands disapproved clause 10 (formerly part 2)

*** The United Kingdom disapproved clauses 14 and 15 (formerly parts 6 and 7)

Methanol for industrial use — Methods of test

1 Scope and field of application

This International Standard gives general instructions and specifies methods of test for the analysis of methanol for industrial use.

The methods of test relating to methanol for industrial use are the following:

- Determination of density at 20 °C
- Determination of dry residue after evaporation on a water bath
- Measurement of colour
- Determination of distillation yield
- Determination of water content
- Detection of the alkalinity or determination of the acidity to phenolphthalein
- Estimation of content of carbonyl compounds present in small amounts — Spectrometric method
- Estimation of content of carbonyl compounds present in moderate amounts — Titrimetric method

- Test for miscibility with water
- Determination of permanganate time
- Determination of methyl ketones — Iodometric method

NOTE — 1,10-Phenanthroline spectrometric methods for the determination of the total iron and non-volatile iron contents will be added later.

2 References

ISO 758, *Liquid chemical products for industrial use — Determination of density at 20 °C.*

ISO 759, *Volatile organic liquids for industrial use — Determination of dry residue after evaporation on a water bath — General method.*

ISO 760, *Determination of water — Karl Fischer method (General method).*

ISO 918, *Volatile organic liquids for industrial use — Determination of distillation yield — General method.*¹⁾

ISO 2211, *Liquid chemical products — Measurement of colour in Hazen units (platinum cobalt scale).*

General instructions

3 Sampling²⁾

Place the laboratory sample in the dark, in a clean, dry and airtight, ground glass stoppered bottle or a screw-capped bottle fitted with a polyethylene cone insert of such capacity that it is almost entirely filled by the sample. If it is necessary to seal the bottle, care shall be taken to avoid contaminating the contents in any way.

NOTE — A sample of not less than 1 000 ml is necessary for performing all the tests specified for the product.

4 Test report

The test report, for each determination, shall contain the following particulars:

- a) an identification of the sample;
- b) the reference of the method used;
- c) the results and the method of expression used;
- d) any unusual features noted during the determination;
- e) any operation not included in this International Standard or in the International Standards to which reference is made, or regarded as optional.

1) At present at the stage of draft. (Revision of ISO/R 918.)

2) The sampling of liquid chemical products for industrial use will form the subject of a future International Standard.