

---

# International Standard



# 756/1

---

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

---

## **Propan-2-ol for industrial use — Methods of test — Part 1 : General**

*Propanol-2 à usage industriel — Méthodes d'essai — Partie 1 : Généralités*

**First edition — 1981-12-01**

---

**UDC 661.725.4 : 543 : 620.1**

**Ref. No. ISO 756/1-1981 (E)**

**Descriptors :** industrial products, propanes, tests, generalities.

## 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 756/1 was developed by Technical Committee ISO/TC 47, *Chemistry*, and was circulated to the member bodies in October 1980.

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

Australia	Egypt, Arab Rep. of	Korea, Rep. of
Austria	France	Netherlands
Belgium	Germany, F. R.	Poland
Brazil	Hungary	Romania
Bulgaria	India	Switzerland
China	Ireland	United Kingdom
Czechoslovakia	Italy	USSR

The member body of the following country expressed disapproval of the document on technical grounds :

South Africa, Rep. of

International Standards ISO 756/1, ISO 756/2 and ISO 756/3 cancel and replace ISO Recommendation R 756-1968 of which they constitute a technical revision.

# Propan-2-ol for industrial use — Methods of test — Part 1 : General

## 1 Scope and field of application

This part of ISO 756 gives general instructions relating to methods of test for propan-2-ol (isopropyl alcohol) for industrial use.

It also specifies the methods to be used for the determination of density at 20 °C, for the determination of boiling range, for the determination of dry residue after evaporation on a water bath, for the measurement of colour, for the determination of water content, and for the determination of aldehydes and ketones content.

The present list of parts of ISO 756 is given in the annex.

## 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 characteristics — General method*.<sup>1)</sup>

ISO 1843/3, *Higher alcohols for industrial use — Methods of test — Part 3 : Determination of carbonyl compounds content — Potentiometric method*.

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

## 3 Sampling<sup>2)</sup>

Store the laboratory sample in a clean, dry, air-tight glass bottle fitted with a ground glass stopper, 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, take care to avoid any risk of contamination of the contents.

NOTE — A sample of not less than 750 ml is necessary for performing all the tests specified for the product.

## 4 Determination of density at 20 °C

Use the method specified in ISO 758.

## 5 Determination of boiling range

Use the method specified in ISO 918, subject to the following modifications appropriate to propan-2-ol.

5.1 **Thermometer**, complying with the requirements of ISO 918, sub-clause 5.1.2, and of table 1.

Table 1 — Requirements for the thermometer

Temperature range	Graduations	Maximum error	Maximum error in an interval of 10 °C
°C	°C	°C	°C
48 to 102	0,2	0,2	0,2

### 5.2 Temperature correction

If the corrected barometric pressure deviates from 1 013 mbar<sup>3)</sup>, apply a correction to the observed temperature by subtracting 0,025 °C for every millibar above, or adding 0,025 °C for every millibar below, 1 013 mbar (see ISO 918, clause 9).

### 5.3 Distillation

Regulate the rate of heating so that the first drop of distillate falls from the end of the condenser after 7 to 12 min (see ISO 918, sub-clause 7.2).

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.

3) 1 bar = 10<sup>5</sup> Pa