# INTERNATIONAL STANDARD



INTERNATIONAL ORGANIZATION FOR STANDARDIZATION MEЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ ORGANISATION INTERNATIONALE DE NORMALISATION

# Phthalate esters for industrial use — Methods of test — Part I : General

Phtalates à usage industriel — Méthodes d'essai — Partie I : Généralités

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#### **FOREWORD**

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO nember 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, Fechnical Committee ISO/TC 47, *Chemistry*, has reviewed ISO Recommendation 1385-1970 and found it technically suitable for transformation. The technical committee, however, divided the Recommendation into five parts (ISO 1385 Parts 17 V), which therefore replace ISO Recommendation R 1385-1970, to which they are technically identical.

ISO Recommendation R 1385 had been approved by the member bodies at the following countries:

Austria Belgium Brazil Cuba Czechoslovakia France Germany

Hungary

India

Iran Ireland Italy Japan Korea, Rep. of Netherlands New Zealand Romania South Africa, Rep.

Spain
Sweden
Switzerland
Thailand
Turkey

United Kingdom U.S.S.R.

No member body had expressed disapproval of the Recommendation.

Portugal

Poland

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

France Netherlands

# Phthalate esters for industrial use — Methods of test — Part I: General

# 1 SCOPE AND FIELD OF APPLICATION

This part of ISO 1385 gives general instructions relating to methods of test for certain planelate esters for industrial use. It also specifies the methods to be used for the following tests:

- measurement of colour;
- determination of density at 20  $^\circ$
- determination of water content;
- determination of iodine value (applicable only to diallyl phthalate);
- determination of refractive index;
- determination of flash point;
- determination of viscosity (not applicable to dially) phthalate).

It is applicable to the following products (except as indicated above):

dimethyl phthalate diethyl phthalate di-isopropyl phthalate diallyl phthalate di-isobutyl phthalate di-n-butyl phthalate dihexyl phthalates

diheptyl phthalates dioctyl phthalates dinonyl phthalates didecyl phthalates ditridecyl phthalates dibutoxyethyl phthalate benzyl butyl phthalate

The present list of parts of ISO 1385 is given in the annex.

#### 2 REFERENCES

ISO/R 150, Raw, refined and boiled linseed oil.

ISO 758, Liquid chemical products for industrial use – Determination of density at  $20\,^{\circ}$ C.

ISO 760, Determination of water content — Karl Fischer method.

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

ISO 2592, Petroleum products — Determination of flash and fire points — Cleveland open-cup method.

ISO 3104, Petroleum products — Transparent and opaque liquids — Determination of kinematic viscosity and calculation of dynamic viscosity.

ISO..., Liquid chemical products for industrial use — Sampling. 1)

#### 3 SAMPLING

Sample in accordance with ISO... Additionally, the laboratory sample shall have a volume of not less than 500 ml. It shall be preserved in a clean, dry, airtight, glass-stoppered bottle of such a size that it is nearly filled by the sample and shall be stored in the dark.

If it has been necessary to seal the container, care shall be taken to avoid contaminating the contents in any way.

### **MEASUREMENT OF COLOUR**

the method specified in ISO 2211.

### 5 DETERMINATION OF DENSITY AT 20 $^{\circ}$ C

Use the method specified in ISO 758.

## 6 DETERMINATION OF WATER CONTENT

Use any of the methods specified in ISO 760, on a test portion of 20 ml of the laboratory sample.

### 7 DETERMINATION OF JODINE VALUE

(applicable only to diallyl phthalate)

Use the method specified in clause A.7 of annex A of ISO/R 150.

#### 8 DETERMINATION OF REFRACTIVE INDEX

Use a refractometer that enables the refractive index for the sodium D line at 20  $\pm$  2  $^{\circ}\text{C}$  to be determined to four decimal places.

<sup>1)</sup> In preparation.