

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION MEM JYHAPOJHAS OPTAHUSALUS TO CTAHUAPTUSALUU ORGANISATION INTERNATIONALE DE NORMALISATION

Phthalate esters for industrial use - Methods of test -Part II: Measurement of colour after heat treatment (Diallyl phthalate excluded)

Phtalates à usage industriel - Méthodes d'essai -Partie II : Mesurage de la coloration après chauffage (Phtalate de diallyle exclu)

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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.

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 1385-1970 and found it technically suitable for transformation. The technical committee, however, divided the Recommendation into five parts (ISO 1385 Parts I to 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 of the following countries :

Austria Belgium Brazil Cuba Czechoslovakia France Germany Hungary India Iran Ireland Italy Japan Korea, Rep. of Netherlands New Zealand Poland Portugal Romania South Africa, Rep. of Spain Sweden Switzerland Thailand Turkey United Kingdom U.S.S.R.

No member body had expressed disapproval of the Recommendation.

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

France Netherlands

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Phthalate esters for industrial use – Methods of test – Part II : Measurement of colour after heat treatment (Dially) phthalate excluded)

1 SCOPE AND FIELD OF APPLICATION

This part of ISO 1385 specifies a method for the measurement of the colour, in Hazen units, after heat treatment, of phthalate esters for industrial use.

It is not applicable to dially phthalate because of the risk of explosive polymerization.

This document should be read in conjunction with part I (see the annex).

2 REFERENCE

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

3 PRINCIPLE

Measurement of colour, by the method specified in ISO 2211, of a test portion after a specified heat treatment.

4 REAGENTS

As specified in clause 4 of ISO 2211.

5 APPARATUS

As specified in clause 5 of ISO 2211, and the following :

5.1 Tube, of borosilicate glass, of length about 200 mm, external diameter 38 ± 1 mm and wall thickness 1,0 ± 0,1 mm, and fitted with a ground glass stopper.

5.2 Oil-bath, capable of being controlled at 180 ± 2 °C and of a heat capacity sufficient to maintain this temperature when the tube (5.1) containing the test portion is introduced.

6 PROCEDURE

Transfer 70 ml of the laboratory sample to the tube (5.1) and close it with its stopper. Place in the oil-bath (5.2), controlled at 180 ± 2 °C, ensuring that the temperature remains within the specified limits.

After 120 ± 2 min, remove the tube from the oil-bath and allow it to cool, in air, to ambient temperature. Measure the colour by the method specified in ISO 2211.

7 EXPRESSION OF RESULTS

Report the result to the nearest 10 Hazen units.

ANNEX

ISO PUBLICATIONS RELATING TO PHTHALATE ESTERS FOR INDUSTRIAL USE

- ISO 1385/I General.*
- ISO 1385/II Measurement of colour after heat treatment (Diallyl phthalate excluded).
- ISO 1385/III Determination of ash.
- ISO 1385/IV Determination of acidity to phenolphthalein Titrimetric method.
- ISO 1385/V Determination of ester content Titrimetric method after saponification.

* The determination of the iodine value specified in ISO 1385/I is applicable only to diallyl phthalate. The determination of the viscosity specified in ISO 1385/I is not applicable to diallyl phthalate.