

SLOVENSKI STANDARD

SIST EN ISO 4630-2:2005

01-april-2005

**Prozorne tekočine - Ocenjevanje barve z Gardnerjevo barvno lestvico - 2. del:
Spektrofotometrijska metoda (ISO 4630-2:2004)**

Clear liquids - Estimation of colour by the Gardner colour scale - Part 2:
Spectrophotometric method (ISO 4630-2:2004)

Klare Flüssigkeiten - Bestimmung der Farbe nach der Gardner-Farbskala - Teil 2:
Spektralphotometrisches Verfahren (ISO 4630-2:2004)

Liquides clairs - Evaluation de la couleur au moyen de l'échelle Gardner - Partie 2:
Méthode spectrophotométrique (ISO 4630-2:2004)

Ta slovenski standard je istoveten z: EN ISO 4630-2:2004

ICS:

17.180.20	Barve in merjenje svetlobe	Colours and measurement of light
87.060.99	Druge sestavine barv	Other paint ingredients

SIST EN ISO 4630-2:2005

en

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 4630-2

November 2004

ICS 87.060.20

English version

**Clear liquids - Estimation of colour by the Gardner colour scale -
Part 2: Spectrophotometric method (ISO 4630-2:2004)**

Liquides clairs - Evaluation de la couleur au moyen de
l'échelle Gardner - Partie 2: Méthode spectrophotométrique
(ISO 4630-2:2004)

Klare Flüssigkeiten - Bestimmung der Farbe nach der
Gardner-Farbskala - Teil 2: Spektralphotometrisches
Verfahren (ISO 4630-2:2004)

This European Standard was approved by CEN on 14 November 2004.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

EN ISO 4630-2:2004 (E)**Foreword**

This document (EN ISO 4630-2:2004) has been prepared by Technical Committee ISO/TC 35 "Paints and varnishes" in collaboration with Technical Committee CEN/TC 139 "Paints and varnishes", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2005, and conflicting national standards shall be withdrawn at the latest by May 2005.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Endorsement notice

The text of ISO 4630-2:2004 has been approved by CEN as EN ISO 4630-2:2004 without any modifications.

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INTERNATIONAL STANDARD

ISO
4630-2

First edition
2004-11-15

Clear liquids — Estimation of colour by the Gardner colour scale —

Part 2: Spectrophotometric method

*Liquides clairs — Évaluation de la couleur au moyen de l'échelle
Gardner —*

Partie 2: Méthode spectrophotométrique

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ISO 4630-2:2004(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established 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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 4630-2 was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 10, *Test methods for binders for paints and varnishes*, in collaboration with ASTM D 01.34, *Naval Stores*. It has been harmonized with ASTM D 6166-97, *Standard Test Method for Color of Naval Stores and Related Products (Instrumental Determination of Gardner Color)*.

ISO 4630 consists of the following parts, under the general title *Clear liquids — Estimation of colour by the Gardner colour scale*:

- Part 1: Visual method <https://standards.iteh.ai/catalog/standards/sist/3e586613-5fed-415e-91f2-abb25d0971dc/sist-en-iso-4630-2-2005>
- Part 2: Spectrophotometric method [abb25d0971dc/sist-en-iso-4630-2-2005](https://standards.iteh.ai/catalog/standards/sist/3e586613-5fed-415e-91f2-abb25d0971dc/sist-en-iso-4630-2-2005)

Clear liquids — Estimation of colour by the Gardner colour scale —

Part 2: Spectrophotometric method

1 Scope

This part of ISO 4630 specifies a method for estimating, by means of the Gardner colour scale, the colour of clear, yellow/brown liquid products using colour-measuring instruments. The results might be invalid if other products are tested. The test uses the Gardner colour scale described in ISO 4630-1.

The method is applicable to drying oils, varnishes and solutions of fatty acids, polymerized fatty acids, resins, tall oil, tall oil fatty acids, rosin and related products.

The method described provides a more precise way of measuring Gardner colour than that described in ISO 4630-1. It is applicable to products having colours from Gardner 1 to Gardner 18. The Gardner scale is not applicable to products with colours lighter than 1 or darker than 18.

2 Normative references

[SIST EN ISO 4630-2:2005](https://standards.iteh.ai/catalog/standards/sist/3e586613-5fed-415e-91f2-ab25d0971dc/sist-en-iso-4630-2-2005)

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The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 4630-1, *Clear liquids — Estimation of colour by the Gardner colour scale — Part 1: Visual method*

ISO 15528, *Paints, varnishes and raw materials for paints and varnishes — Sampling*

CIE Publication No. 15.2, *Colorimetry*

3 Principle

The colour of a liquid sample is measured using an instrument capable of measuring transmitted colour and reporting in Gardner colours or in a colour system that can be converted into Gardner colours.

4 Apparatus and materials

4.1 Colour-measuring instrument, capable of measuring transmitted colour ($0^\circ/180^\circ$ geometry) and reporting the results in the Gardner colour scale described in ISO 4630-1. If such an instrument is not available, one may be used which is capable of measuring transmitted colour and reporting in tristimulus values or chromaticity coordinates using standard illuminant C and the 2° observer, described in CIE Publication No. 15.2.

4.2 Glass absorption cells, 10 mm path length, unless a different path length is specified by the instrument manufacturer.