

International Standard



4621

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

Chrome oxide green pigments — Specifications and methods of test

Pigments verts d'oxyde de chrome — Spécifications et méthodes d'essai

First edition — 1986-07-15

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.

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. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 4621 was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Chrome oxide green pigments — Specifications and methods of test

1 Scope and field of application

This International Standard specifies the requirements and corresponding methods of test for chrome oxide green pigments suitable for general use.

2 References

ISO 385/1, *Laboratory glassware — Burettes — Part 1: General requirements*.

ISO 648, *Laboratory glassware — One-mark pipettes*.

ISO 787, *General methods of test for pigments and extenders —*

Part 1: Comparison of colour of pigments.

Part 2: Determination of matter volatile at 105 °C.

Part 3: Determination of matter soluble in water — Hot extraction method.

Part 5: Determination of oil absorption value.

Part 7: Determination of residue on sieve — Water method — Manual procedure.

Part 9: Determination of pH value of an aqueous suspension.

Part 16: Determination of relative tinting strength (or equivalent colouring value) and colour on reduction of coloured pigments — Visual comparison method.

Part 20: Comparison of ease of dispersion (Oscillatory shaking method).

ISO 842, *Raw materials for paints and varnishes — Sampling*.

ISO 1042, *Laboratory glassware — One-mark volumetric flasks*.

ISO 3696, *Water for laboratory use — Specifications*.¹⁾

ISO 3856/6, *Paints and varnishes — Determination of "soluble" metal content — Part 6: Determination of total chromium content of the liquid portion of the paint — Flame atomic absorption spectrometric method*.

ISO 6713, *Paints and varnishes — Preparation of acid extracts from paints in liquid or powder form*.

3 Definition

chrome oxide green pigment: An inorganic, coloured pigment consisting essentially of chromium(III) oxide (Cr_2O_3) in the form of a dry powder.

4 Classification

This International Standard specifies the following three grades of chrome oxide green pigments, which shall not be in admixture with other colouring matter of organic or inorganic nature and shall be free from extenders or diluents (see also the note to clause 9).

Grade 1: These pigments shall contain a residue on a sieve of 45 μm mesh aperture of not more than 0,01 % (m/m).

Grade 2: These pigments shall contain a residue on a sieve of 45 μm mesh aperture of more than 0,01 % (m/m) and not more than 0,1 % (m/m).

Grade 3: These pigments shall contain a residue on a sieve of 45 μm mesh aperture of more than 0,1 % (m/m) and not more than 0,5 % (m/m).

5 Required characteristics and their tolerances

5.1 For chrome oxide green pigments complying with this International Standard, the essential requirements are specified in table 1 and the conditional requirements are referred to in table 2. For the conditional requirements according to table 2, agreement between the interested parties is necessary.

5.2 The agreed reference pigment, referred to in table 2, shall conform with the requirements specified in table 1.

6 Sampling

Take a representative sample of the product to be tested as described in ISO 842.

1) At present at the stage of draft.