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Pigments and extenders — Methods of assessment of dispersion characteristics —

Part 1:

Assessment from the change in tinting strength
of coloured pigments

*Pigments et matières de charge — Méthodes d'évaluation de la
dispersibilité —*

Partie 1: Évaluation à partir de la variation de la force colorante



Reference number
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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.

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.

International Standard ISO 8781-1 was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*.

ISO 8781 consists of the following parts, under the general title *Pigments and extenders — Methods of assessment of dispersion characteristics*:

- *Part 1: Assessment from the change in tinting strength of coloured pigments*
- *Part 2: Assessment from the change in fineness of grind*
- *Part 3: Assessment from the change in gloss*

Annex A forms an integral part of this part of ISO 8781.

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Introduction

The degree of development of tinting strength of a coloured pigment in a dispersion is dependent on the amount of work done in the preparation of the dispersion of the pigment in a binder system. The ease with which the ultimate tinting strength is achieved may therefore be used to assess the ease of dispersion of that pigment. Thus, if the ultimate tinting strength can be attained easily, the pigment is considered to be readily dispersible.

The method described consists essentially of three steps:

- a) preparation in stages of a range of dispersions of the coloured pigment in accordance with an appropriate part of ISO 8780;
- b) preparation of reduced pastes from each of these dispersions;
- c) determination of the rate of development of the tinting strength as a function of the amount of work done (this latter is related to the incremental stages of dispersion).

The rate of development of tinting strength is assessed either by calculating the percentage increase between two stages of dispersion or graphically.