
**Pigments, dyestuffs and extenders —
Terminology —**

Part 2:
**Classification of colouring materials
according to colouristic and chemical
aspects**

Pigments, colorants et matières de charge — Terminologie —

*Partie 2: Classification des matières colorantes en fonction de leurs
propriétés coloristiques et chimiques*



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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 256, *Pigments, dyestuffs and extenders*.

ISO 18451 consists of the following parts, under the general title *Pigments, dyestuffs and extenders — Terminology*:

- *Part 1: General terms*
- *Part 2: Classification of colouring materials according to colouristic and chemical aspects*

Introduction

In accordance with ISO 18451-1, it depends on the individual application as to whether a substance is to be considered as a pigment or as an extender. Substances like aluminium silicate, barium sulfate and calcium carbonate are taken into consideration in [Clauses 2](#) and [3](#).

In addition to the examples of the colouring materials, the designation in accordance with the Colour Index¹⁾ has been included. However it is to be noted that for a number of the given designations of colouring materials (which are partly collective designations) not only one designation in accordance with the Colour Index is possible, even if in this part of ISO 18451 only one Colour Index designation is given.

In the “Classification scheme” in [Clause 2](#), some spaces are empty. Corresponding colouring materials are either without practical importance or they do not exist for physical reasons.

Inorganic dyestuffs, e.g. those for use with enamel, glass, ceramics and food, have been only mentioned in [Clauses 2](#) and [3](#) but not classified in accordance with certain aspects. The reason for this is that up to now such colouring materials are excluded from the work of ISO/TC 256.

1) The Colour Index (briefly: C.I.) is a work of reference existing since 1925, and comprising all usual colouring materials and dyestuff chemicals being used as their basis. It is accepted as a standard work in the field of pigment and dyestuff chemistry.

Pigments, dyestuffs and extenders — Terminology —

Part 2:

Classification of colouring materials according to colouristic and chemical aspects

1 Scope

This part of ISO 18451 applies for the industry producing colouring materials and the consumer who uses the products of this industry. In this part of ISO 18451, the colouring materials are classified in accordance with colouristic and chemical aspects.

Some dyestuffs for use in the ceramics and food industries are listed as examples.

2 Classification of inorganic and organic colouring materials in accordance with colouristic aspects

Inorganic and organic colouring materials are classified in accordance with colouristic aspects as given in [Figure 1](#).