INTERNATIONAL STANDARD

ISO 9298

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Rubber compounding ingredients — Zinc oxide — Test methods

Ingrédients de mélange du caoutchouc — Oxyde de zinc — Méthodes d'essai

Reference number
ISO 9298:1995(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.

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 9298 was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 3, *Raw materials (including latex) for use in the rubber industry*.

Annexes A, B and C form an integral part of this International Standard. Annex D is for information only.

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Rubber compounding ingredients — Zinc oxide — Test methods

WARNING — Persons using this International Standard should be familiar with normal laboratory practice. The standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any national regulatory conditions.

1 Scope

1.1 This International Standard specifies the methods to be used for the evaluation of zinc oxide for use in the rubber industry.

1.2 The analytical methods are applicable to all commercial zinc oxides, for example:

— direct type (American process);

— indirect type (French process);

— other types produced by different chemical methods, i.e. precipitation and calcination.

Zinc oxide can also be coated with organic materials, such as fatty acids, oil, wetting agents, etc., in order to improve the dispersion in rubber.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 787-2:1981, *General methods of test for pigments and extenders — Part 2: Determination of matter volatile at 105 °C.*

ISO 787-4:1981, *General methods of test for pigments and extenders — Part 4: Determination of acidity or alkalinity of the aqueous extract.*

ISO 787-7:1981, *General methods of test for pigments and extenders — Part 7: Determination of residue on sieve — Water method — Manual procedure.*

ISO 787-8:1979, *General methods of test for pigments and extenders — Part 8: Determination of matter soluble in water — Cold extraction method.*

ISO 1124:1988, *Rubber compounding ingredients — Carbon black shipment sampling procedures.*

ISO 5794-1:1994, *Rubber compounding ingredients — Silica, precipitated, hydrated — Part 1: Non-rubber tests.*

3 Sampling

Sampling shall be carried out in accordance with ISO 1124 for dry powders.