

Australian Standard[®]

**PAINTS AND RELATED
MATERIALS—EXTENDERS**

This Australian standard was prepared by Committee CH/3, Paints and Related Materials. It was approved on behalf of the Council of the Standards Association of Australia on 2 April 1985 and published on 12 July 1985.

The following interests are represented on Committee CH/3:

Australian Federation of Consumer Organizations
Australian Paint Manufacturers Federation
Australian Retailers Association
Confederation of Australian Industry
Department of Defence
Government Paint Committee
National Association of Australian State Road Authorities
National Association of Testing Authorities, Australia
Oil and Colour Chemists Association, Australia
Railways of Australia Committee
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MATERIALS—EXTENDERS**

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PREFACE

This standard was prepared by the Association's Committee on Paints and Related Materials at the request of the Chemical Standards Board in response to the need for a suitable basis for the production and supply of extenders used in paints in Australia.

The requirements of this standard are based on those specified in ISO 3262, Extenders for Paints. However, this standard differs from ISO 3262 in that (a) it covers the more restricted and non-equivalent range of extenders produced in Australia and (b) the sieve sizes stipulated for the determination of residue on sieve have been altered to suit the preferences of Australian suppliers and paint manufacturers.

It is also acknowledged that many of the methods of test described in the appendices of this standard are based on the methods of test contained in ISO 3262. It was felt that as far as possible the Australian standard should be self-contained which, it is hoped, has been achieved.

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard
for
PAINTS AND RELATED MATERIALS—EXTENDERS

1 SCOPE. This standard specifies requirements for extenders used in the manufacture of paints and related materials.

2 REFERENCED DOCUMENTS. The following standards are referred to in this standard:

- AS 1580 Methods of Test for Paints and Related Materials
Method 505.1* pH of Water-based Paints
Method 604.1 45°, 0° Reflectance of White and Pale Coloured Paints
- AS 2310 Glossary of Paint and Painting Terms
- AS 2503.1 Chemical Analysis of Refractories and Refractory Materials
Part 1—Silica Refractory Materials
- ISO 842 Raw Materials for Paints and Varnishes—Sampling

3 DEFINITIONS. For the purpose of this standard, the terms and definitions given in AS 2310 apply.

4 TYPES AND GRADES. The extenders shall be classified in types† according to the nature of the material and then in grades according to their residues on sieves and particle size distribution, as follows:

- (a) *Extender Type 1:* Barytes (grades a, b, c, d)
Barium sulphate, BaSO₄, natural.
- (b) *Extender Type 2:* Calcium carbonate, CaCO₃, crystalline (grades a, b, c, d).
- (c) *Extender Type 3:* China clay (kaolin grades a, b, c, d).
Aluminium silicate, natural, hydrated kaolin, essentially kaolinite, Al₂O₃·2SiO₂·2H₂O, of lamellar crystalline form.
- (d) *Extender Type 4:* Talc, non-fibrous (grades a, b).
Magnesium silicate, natural, hydrated, 3MgO·4SiO₂·H₂O.
- (e) *Extender Type 5:* Talc, lamellar form (grades a, b, c).
Magnesium silicate, natural, hydrated, 3MgO·4SiO₂·H₂O.
- (f) *Extender Type 6:* Mica (grades a, b).
Potassium aluminium silicate, natural, hydrated, K₂O·3Al₂O₃·6SiO₂·2H₂O (lamellar form).
Muscovite.
- (g) *Extender Type 7:* Diatomite.
Diatomaceous, siliceous earth, with SiO₂ content not less than 80 percent.

- (h) *Extender Type 8:* Silica (grades a, b, c, d).

Silica, natural, with SiO₂ content equal to or greater than 98 percent.

- (j) *Extender Type 9:* Sand (grades a, b, c).

Silica, natural, SiO₂.

5 REQUIREMENTS.

5.1 General. Extenders shall be in the form of a dry powder or in such condition that they can be readily reduced thereto by crushing under a palette knife without any grinding.

5.2 Composition and properties. Unless otherwise specified, the composition and properties of extenders shall conform to the limits given in Table 1 when determined in accordance with the relevant test methods.

5.3 Reflectance. When determined in accordance with AS 1580, Method 604.1, the reflectance of a surface of a compacted test specimen of the extender shall be as nominated by the supplier.

6 PACKAGING. The product shall be packaged in clean, dry and sealed containers strong enough to withstand normal conditions of commercial usage without loss of contents. The package shall be capable of being resealed.

7 LABELLING. The following information shall be legibly and durably marked on each container or on a label securely affixed thereto:

- (a) The name or registered mark of the manufacturer.
- (b) Description of contents.
- (c) The contents by mass, in kilograms.
- (d) Production or batch number(s).
- (e) Information required by any appropriate statutory regulations.

NOTE: Manufacturers who place the number of this Australian standard on extender containers, on packaging or on literature related thereto should ensure that the product is manufactured to comply with the standard.

Attention is particularly drawn to the scheme for independent assurance provided by the Standards Mark which is a registered certification trade mark owned by the Standards Association of Australia and which is available for use with suitable Australian standards.

The presence of the Standards Mark on or in relation to a product is an assurance that the goods have been produced under a system of supervision, control and testing applied during manufacture and including periodical inspections at the manufacturer's works in accordance with the certification mark scheme of the SAA.

* In course of preparation.

† The type numbers used in this standard are not equivalent to those in ISO 3262.