

Specification for

# Desiccant activated clay

# Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Chemicals Standards Policy Committee (CIC/-) to Technical Committee CIC/2, upon which the following bodies were represented:

Chemical Industries Association  
Ministry of Defence  
Royal Society of Chemistry  
Society of British Aerospace Companies Ltd.  
Society of Environmental Engineers

This British Standard, having been prepared under the direction of the Chemicals Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on 20 December 1991

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The following BSI references relate to the work on this standard:  
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## Amendments issued since publication

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## Foreword

This British Standard has been prepared under the direction of the Chemicals Standards Policy Committee.

This British Standard applies to material to be used primarily in packaging.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

**Compliance with a British Standard does not of itself confer immunity from legal obligations.**

### Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 and 2, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

## 1 Scope

This British Standard specifies requirements for desiccant activated clay primarily intended for use in packaging.

NOTE The titles of the publications referred to in this British Standard are listed on the inside back cover.

## 2 Sampling

Test samples shall be prepared in accordance with BS 3482-1.

For preparation of the dried sample, 75 g of the laboratory sample shall be dried for 4 h in an oven controlled at  $145 \pm 2.5$  °C.

NOTE Desiccant activated clay is highly hygroscopic and should be exposed to the atmosphere for the minimum possible period of time during sampling.

## 3 Moisture content

When determined in accordance with BS 3482-2, the moisture content dried at  $145 \pm 2.5$  °C for 4 h shall not exceed the value given in Table 1.

## 4 pH

When determined in accordance with BS 3482-3, the pH shall be not lower and not higher than the values given in Table 1.

## 5 Water-soluble chlorides

When determined in accordance with BS 3482-4, the content of water-soluble chlorides shall not exceed the value given in Table 1.

## 6 Water-soluble sulfates

When determined in accordance with BS 3482-5, the content of water-soluble sulfates shall not exceed the value given in Table 1.

## 7 Adsorptive capacity

When determined at 50 % r.h. and at 25 °C in accordance with method A of BS 3482-6:1991, the adsorptive capacity of material dried at  $145 \pm 2.5$  °C for 4 h shall be not less than the value given in Table 1.

## 8 Particle size

When determined and expressed in accordance with BS 3482-7, the particle size range shall be as given in Table 1.

## 9 Friability and dust

When determined in accordance with BS 3482-11, the level of friability and dust shall not exceed the value given in Table 1.

## 10 Packaging

The material shall be supplied in sound, clean and dry containers, which are airtight and capable of being resealed so as to avoid absorption of moisture from the atmosphere.

NOTE The following packing materials are recommended.

- a) For bulk material:
  - 1) steel drums with sealing gaskets;
  - 2) fibreboard drums or boxes with closeable liners of aluminium foil laminate or polyethylene.
- b) For small packages: metal tubes with screw caps.

## 11 Marking

Containers and packaging shall be marked at least with the following information:

- a) the number and date of this British Standard, i.e. BS 7529:1991<sup>1)</sup>;
- b) the statement "Not to be opened until required for use".

<sup>1)</sup> Marking BS 7529:1991 on or in relation to a product represents a manufacturer's declaration of conformity, i.e. a claim by or on behalf of the manufacturer that the product meets the requirements of the standard. The accuracy of the claim is therefore solely the responsibility of the person making the claim. Such a declaration is not to be confused with third party certification of conformity, which may also be desirable.

Table 1 — Chemical and physical properties

Property	Value	Method of test
Moisture content, % ( <i>m/m</i> ) max.	2.0	BS 3482-2
pH, min. max.	5.5 8.0	BS 3482-3
Water-soluble chlorides, % ( <i>m/m</i> ) max.	0.05	BS 3482-4
Water-soluble sulfates, % ( <i>m/m</i> ) max.	1.0	BS 3482-5
Adsorptive capacity, % ( <i>m/m</i> ) min.	20	BS 3482-6, Method A
Particle size range, % ( <i>m/m</i> ) Particles less than 0.25 mm Particles greater than 6.7 mm	≤ 0.5 0	BS 3482-7
Friability and dust <sup>a</sup> , % ( <i>m/m</i> ) < 125 μm max.	0.5	BS 3482-11
<sup>a</sup> As desiccant activated clay is produced from a natural source, it should also be free from fibrous and extraneous matter.		

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## Publication(s) referred to

BS 3482, *Methods of test for desiccants.*

BS 3482-1, *Sampling, and preparation and storage of test samples.*

BS 3482-2, *Determination of moisture content.*

BS 3482-3, *Determination of pH.*

BS 3482-4, *Determination of water-soluble chlorides content.*

BS 3482-5, *Determination of water-soluble sulphates content.*

BS 3482-6, *Determination of adsorptive capacity.*

BS 3482-7, *Determination of particle size.*

BS 3482-11, *Determination of friability and dust content.*

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