

# Technical information

#### High Performance Cement (CEM II/B-V 42,5N) **PRODUCT DATA SHEET**

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### Blue Circle SULFACRETE

A Portland-fly ash cement with a high sulfate resistance and a moderate heat of hydration.

Blue Circle Sulfacrete is a low-alkali Portland-fly ash cement that conforms to the requirements of BS EN 197-1 CEM II/B-V 42,5N. This cement is classified by BS 8500 with a +SR suffix, signifying enhanced sulfate resistance. Blue Circle Sulfacrete is a quality-assured cement with independent third-party certification and carries a CE Mark.

#### APPLICATIONS

#### Use to:

- Reduce damage to concrete, mortar and grout exposed to sulfate attack including:
  manholes
  - effluent treatment plants
- Minimise the risk of alkali-silica reaction
- A moderately low-heat cement to reduce the thermallyinduced stresses in large pours
- Marine concrete.

#### PROPERTIES

- Portland-fly ash cement with special sulfate-resisting properties for use in all sulfate conditions (except DC-4m), as defined in Building Research Establishment Special Digest 1: 2005 and BS 8500: Concrete – Complementary British Standard to BS EN 206-1
- Equivalent sulfate resistance to BS EN 197-1 CEM I SR3
- Reduced alkali (declared mean equivalent Na<sub>2</sub>O not exceeding 0.6%)
- Reduced water demand
- Slower early-age strength development than Portland cement (CEM I) reducing the risk of early thermal cracking
- Better resistance to chloride ingress than Portland cement (CEM I). Suitable for concrete in the marine environment.

#### AVAILABILITY

Blue Circle Sulfacrete is available in 25kg bags throughout the United Kingdom.

#### **CONDITIONS OF USE**

- Blue Circle Sulfacrete may be used in the range of traditional nominal mixes as for traditional Portland Cement
- To achieve optimum performance from Blue Circle Sulfacrete in concrete or other products, it is essential that it is correctly specified and used
- As with other cements in building work, there is no substitute for good practice and workmanship. It is essential to use the correct materials, proportion and mix the materials properly, add the correct amount of water, compact, cure and protect as appropriate. When using CEM II cement, it is particularly important to ensure that effective curing is applied
- Do not use when air temperature is below 5°C or greater than 30°C
- The final finish quality of this material will depend upon the operative having the required skills and a familiarity with the material and its application methods
- Tarmac Cement cannot be held responsible where workmanship has not been carried out in accordance with good practice
- Manual handling should comply with The Manual Handling Operations Regulations 1992
- Blue Circle Sulfacrete is manufactured from natural products, and slight shade variations may occur. Shade variations are likely from differing manufacturing centres.



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#### STORAGE

This product should be stored in unopened bags clear of the ground in cool dry conditions and should be stacked in a safe and stable manner. Information on the maximum storage period can be found on the bag.

#### **HEALTH AND SAFETY**

Contact between cement powder and body fluids (eg, sweat and eye fluids) may cause irritation, dermatitis or burns. Cement is classified as an irritant under the Chemicals (Hazard Information and Packaging) Regulations. For further information, including control of soluble hexavalent chromium, refer to the appropriate Tarmac Cement Health and Safety Information Sheets (Portland cements).

#### **TECHNICAL SUPPORT**

Further information and advice on this product and the full range of Tarmac Cement products can be obtained through the contact listed below.

For more details contact: customerservice@tarmac.com

The information given in this technical data sheet is based on our current knowledge and is intended to provide general notes on our products and their uses. Tarmac endeavour to ensure that the information given is accurate, but accept no liability for its use or its suitability for particular application because of the product being used by the third party without our supervision. Any existing intellectual property right must be observed.

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