

# Heidelberg Materials Portland Cement CEM I 52,5N

Technical data sheet

**Heidelberg Materials Bulk CEM I 52,5N, is a quality assured Portland cement and is manufactured to comply with the requirements of EN 197-1.**

Heidelberg Materials CEM I 52,5N is produced using carefully selected raw materials and strict quality control throughout each stage of the manufacturing process to ensure a consistent final product is achieved.

## Applications

Heidelberg Materials CEM I 52,5N is a commonly used cement for a wide range of applications. These applications cover but are not limited to, general Ready-Mixed concrete, High Strength Pre-Cast and Pre-Stressed Concretes, Sprayed Concrete, Concrete Block Paving (CBP), Grout, Mortar, Render and Screeds.

## Quality

Heidelberg Materials CEM I 52,5N is UKCA Marked in accordance with Construction Products Regulation (Amendment etc.) (EU Exit) Regulations 2019. In addition to applying a system of factory production control, based on ISO 9001 and defined in BS EN 197-2, independent sampling and testing of the Heidelberg Materials CEM I 52,5N, known as Assessment and Verification of Constancy of Performance (AVCP) System 1+, also confirms conformity with all the requirements of BS EN 197-1.

A Declaration of Performance (DoP) and UKCA mark is available online at [www.heidelbergmaterials.co.uk](http://www.heidelbergmaterials.co.uk).

## Compatibility

Heidelberg Materials CEM I 52,5N is suitable for use with a wide range of additives and admixtures to extend the properties and uses of concretes, mortars, renders and screeds. It is recommended that trial mixes are carried out to determine optimum proportions.

## Data and certification

Heidelberg Materials Technical provides current data and routine certification of tests for all essential characteristics including compressive strengths of mortar prisms, fineness, setting times, soundness and chemical composition including alkali levels. These are available on a weekly basis and can be accessed from [www.heidelbergmaterials.co.uk](http://www.heidelbergmaterials.co.uk).

## Mix design

Concrete mix designs need to be adapted to suit individual circumstances. It is strongly recommended that trial mixes are carried out prior to commencement of work to ensure that the mix design and material combinations meet the requirements of the specification and method of use.

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### Availability

Heidelberg Materials CEM I 52,5N is available across the United Kingdom despatched by bulk road tankers to customers local to the cement works, and by rail and road via Heidelberg Materials Cement distribution hubs.

### Product declaration

Parameter	Units.	Max limit
Declared mean alkali (Na <sub>2</sub> Oeq) <sup>1</sup>	%	≥ 0.75
Chloride <sup>2</sup>	%	≥ 0.07
Sulfate	%	≥ 4.00

<sup>1</sup> Declared Mean Alkali (DMA) = Certified average alkali (Mean of at least 25 results) + (1xSD)

<sup>2</sup> Mean of last 25 results.

### Conditions of use

- Methods to prevent loss of moisture from exposed surfaces of concrete, known as curing, should be employed for at least the first 7 days after casting
- As a general rule, concrete should be placed within the range of 10°C to 30°C.
- In cold weather, freshly poured concrete should be protected from low temperatures to avoid frost damage.
- In hot weather and mass concrete pours, there is increased risk of loss of water by evaporation and cracking caused by thermal stresses which could reduce ultimate strength.
- Heidelberg Materials Cement cannot be held responsible for poor workmanship.
- Due to the nature of raw materials used in the production of CEM I 52,5N, slight variations in colour may occur.
- Heidelberg Materials CEM I 52,5N produced at different manufacturing works may also have variation in colour.

### Management systems

Heidelberg Materials Cement are approved to the following management systems:

**ISO 9001** – Quality management

**ISO 14001** – Environmental management

**OHSAS 18001** – Occupational Health and Safety Management

**BES 6001** – Responsible Sourcing of Construction Products

**ISO 50001** – Energy Management

### Technical support and further information

Please refer to the Material Safety Data Sheet for full health and safety information

For further advice please contact Heidelberg Materials cement technical support on **0330 123 4525** or **cement@uk.heidelbergmaterials.com**

**Further copies of this technical data sheet may be obtained from [heidelbergmaterials.co.uk](http://heidelbergmaterials.co.uk)**