Heidelberg Materials Packed Cement High Strength 52,5N

Technical data sheet

Heidelberg Materials High Strength 52,5N (HS52), is a quality assured Portland Limestone Cement and is manufactured to comply with the requirements of EN 197-1 CEM II/A-LL strength classification 52,5N. High Strength 52,5N incorporates quality-controlled limestone to produce a high-performance cement with enhanced sustainability credentials.

Heidelberg Materials HS52 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, Concrete Block Paving (CBP), Grout, Mortar, Render and Screeds.

Quality

Heidelberg Materials HS52 is UKCA Marked in accordance with the Construction Products Regulation (Amendment etc.) (EU Exit) Regulations 2019.

Independent sampling and testing of Heidelberg Materials HS52, confirms conformity with all the requirements of BS EN 197-1. This is known as Assessment and Verification of Constancy of Performance (AVCP) System 1+. This is also in addition to applying a system of factory production control, based on ISO 9001 and defined in BS EN 197-2.

A Declaration of Performance (DoP) and UKCA mark are available online at **www.heidelbergmaterials.co.uk**.

Compatibility

Heidelberg Materials HS52 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

Current data and routine certification of tests for all essential characteristics are available on a weekly basis. These include compressive strength of mortar prisms, fineness, setting times, soundness and chemical composition including alkali levels and can be accessed from **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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Hexavalent Chromium (vi)

The soluble chromium (VI) content is limited to a maximum of 2ppm. The chromium (VI) content is determined in accordance with EN 196-10. The maximum shelf life of Bulk cement is 6 months.

Availability

Heidelberg Materials HS52 cement is supplied in 25 kg bags throughout the UK.

Product declaration

Parameter	Units.	Max limit
Declared mean alkali (Na_2Oeq)[1]	%	≤ 0.75
Chloride [2]	%	≤ 0.07
Sulfate	%	≤ 4.00

[1] Declared Mean Alkali (DMA) = Certified average alkali (Mean of at least 25 results) + (1xSD)
[2] Mean of last 25 results.

Management systems

Heidelberg Materials are approved to the following management systems;

- **ISO 9001** – Quality management
- **ISO 14001** – Environmental management
- **ISO 45001** – Occupational Health and Safety Management
- **BES 6001** – Responsible Sourcing of Construction Products
- **ISO 50001** – Energy Management

Storage

Bags should be stored unopened and clear of the ground in cool dry conditions and protected from excessive draft and all sources of moisture. The maximum shelf life of packed cement is stated on the bag.

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 5°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, cracking caused by thermal stresses and reduced ultimate strength.
- Heidelberg Materials cannot be held responsible for poor workmanship.
- Due to the nature of raw materials used in the production of HS52, slight variations in colour may occur.

Health and safety

Please refer to Material Safety Data Sheet for full information.

Cement becomes highly alkaline when in contact between cement powder and water which includes bodily fluids (e.g. sweat and eye fluids). This can cause irritation, dermatitis or burns. Cement is classified as an irritant. Correct personal Protective Equipment (PPE) should always be worn when undertaking tasks with cement (e.g. work wear, safety glasses, gloves etc).

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