# Hanson Packed Cement High Strength 52,5N Technical Data Sheet



Hanson 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.

#### APPLICATIONS

Hanson 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

Hanson HS52 is UKCA Marked in accordance with the 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 Hanson HS52, 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 are available online at **www.hanson.co.uk**.

# COMPATIBILITY

Hanson 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

Hanson 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.hanson.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.

# **HEXAVALENT CHROMIUM (VI)**

In accordance with the UK REACH Regulations, 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 packed cement is stated on the bag.

## **AVAILABILITY**

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



# **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 last 25 results) + (1xSD)

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

# **MANAGEMENT SYSTEMS**

Hanson Cement 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 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.
- Hanson Cement 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.

#### **TECHNICAL SUPPORT**

For further advice please contact Hanson Cement's Technical Helpline on 0330 123 2441.

# **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).

#### For further information contact:

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Hanson.co.uk

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