



## Cemfree Optima

Cemfree Optima (binder) is a proprietary Alkali-Activated Cementitious Material (AACM) that activates pozzolanic materials such as Ground Granulated Blast Furnace Slag (GGBS) and Pulverised Fly Ash (PFA) to create a concrete that performs in a similar way to OPC.

### Applications

- Female Piles
- Agricultural
- Industrial Flooring
- Precast
- Mortars
- Screeds
- Decorative Concrete
- Temporary Works

### Key benefits

- Reduces the embodied carbon of concrete produced
- Supports the circular economy by reducing need for raw materials and waste to landfill
- Reduces the water footprint of concrete by between 40 - 60%
- Low heat of hydration
- Enhanced chemical resistance and performance in aggressive ground conditions
- Good flow and self-compacting characteristics with low w/b
- Increased aesthetics - whiter than OPC
- Extended open life



### Delivery & use

- Cemfree Masonry Mortar can be delivered in 25kg bags or bulk

### Mixing instructions

- Batched the same way as ordinary concrete through ready-mix batching/volumetric
- Concrete mix design varied to suit individual circumstances
- Trial mixes strongly recommended prior to work to ensure the mix design and material combinations meet requirements of specification and method of use
- Good concreting practice is essential and must be maintained when placing Cemfree Optima
- Must be placed without segregation, fully compacted and correctly cured in accordance with industry and Cemfree's guidelines

### Relevant standards

Cemfree Optima conforms to PAS 8820:2016

<sup>1</sup> BSI standard PD 6697-2019

# PRODUCT DATA SHEET

## Curing methods

The term 'curing' refers to methods to prevent loss of moisture from exposed surfaces of concrete in the first 7 days after casting.

The most common methods are:

- Covering with impermeable sheeting ensuring that edges are held down
- Covering with wet sacking but this must be kept wet by spraying with clean water
- Spraying with a proprietary curing membrane

## Storage & handling

- Cemfree Optima should be stored in silos and handled according to the MSDS.
- Cemfree Optima should be stored for a maximum of 3 months before an additional QA process is undertaken to confirm product performance.

## Personal protective equipment

Please refer to Cemfree Optima MSDS when handling the product

## Binder Contents

Cemfree		
Raw Material	GGBS - Ground Granulated Blast Furnace Slage	95%
	Cemfree activator	5%

## Technical data

Reports of tests providing data on fitness, setting times, soundness, chemical composition and compressive strengths of mortar prisms, are available on request.

## Technical & sales service

For further assistance, please contact the Cemfree team on 01954 780687 or email [sales@cemfree.com](mailto:sales@cemfree.com)

## Legal terms & disclaimer

The information and data contained herein is believed to be accurate and reliable. Specifications and other information contained within this 'TDS' supersede all previously printed material and is subject to change without prior notice. Please refer to DB Group Holdings Limited terms and conditions.