

# PC Blend - WET CAST PRODUCT (WCP)

A blend of CEM I Portland Cement and Cenin Wet Cast Product(WCP)

Cenin PC Blend (WCP) is a factory produced Portland cement containing a proportion of chemically engineered Cenin (WCP) Cement Replacement product

Ideal for ready mix, precast concrete and wet cast specialist applications.

**LOW CARBON**

Reducing CO2 by up to **35%**

## ULTRA LOW CARBON CEMENT REPLACEMENT



Cenin (WCP) is specifically formulated and designed for the requirements of the ready mix and precast concrete industry.

Cenin (WCP) like calcareous fly ash is a fine powder, having hydraulic and/or Pozzolanic properties. It consists essentially of reactive calcium oxide (CaO), reactive silicon dioxide (SiO<sub>2</sub>) and aluminium oxide (Al<sub>2</sub>O<sub>3</sub>). The remainder contains iron oxide (Fe<sub>2</sub>O<sub>3</sub>) and other compounds.

### Typical Chemical composition of Cenin (WCP)

Cenin (WCP) contains the same oxides as Portland cement and other cement replacements but in chemically designed proportions.

Composition	CaO	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>	MgO
GGBS	39%	36%	12%	0.2%	8%
Portland Cement	65%	20%	5%	2%	1%
<b>WCP</b>	<b>45%</b>	<b>30%</b>	<b>12%</b>	<b>1%</b>	<b>6%</b>
PFA	6%	48%	29%	9%	3%

### Features & Benefits

- **Low Carbon Material**
- Bulk deliveries for companies with single silo capacity
- Reduced heat of hydration in large pours \*1
- Faster setting times in cold climatic conditions \*1
- Higher early strength than blends with other standard cement replacements \*2
- Reduced pigment and improved colour enhancement\*2
- Production of lower carbon products
  - 1 Ready mix concrete
  - 2 Precast concrete

### Applications

Cenin PC Blend Wet Cast Product (WCP) is a chemically engineered product specifically formulated and designed for the requirements of the ready mix and precast concrete industry as well as all other wet cast specialist applications and production processes.



**CENIN**  
Cement Replacements  
that don't cost the earth

## Standards

Cenin operates a quality management system that is third party audited to the following standard:

- ISO 9001:2008 Quality Management Standard

Product control testing is conducted following recommendations in the following standard

- ISO 17025 : 2005 General requirements for the competence of testing and calibration laboratories

## Deliveries

Cenin Cement Replacements are available in bulk deliveries using standard powder tankers with an average load of 28 – 29 tonnes.

All Cenin drivers are fully trained and experienced in all aspects of powder handling; it would be appreciated if all discharge zones are fully maintained and accessible at all times of delivery.

## Health and Safety

Contact with wet cementitious materials, wet concrete or mortar can cause irritation, dermatitis or alkali burns. Contact between cementitious materials and body fluids (eg. sweat and eye fluids) can also cause irritation. There is serious risk to the eyes so if these circumstances arise immediately wash the eye with clean or sterile water and seek medical advice immediately. After contact with skin wash affected area with plenty of clean water.

- Wear suitable protective clothing including eye, face and gloves at all times.
- Keep out of reach of children
- Cenin products are fully compliant with the requirements for water-soluble chromium (VI) content in Annex XVII of the REACH regulation.

## Technical Support

Cenin limited has its own independent cement and concrete laboratories and is continually monitoring its products and processes to ensure continual conformity.

We also support our customers on product development and independent analysis.

*Each batch of product we supply is thoroughly tested and analysed and this data is made available to the client. We also store a sample from every load we deliver for future analysis, quality control and monitoring purposes.*

**Cenin Cement Replacements:  
only 43kg of CO<sub>2</sub>  
per tonne**



## ENVIRONMENT

### Summary of emissions

An independent assessment has been carried out and has concluded that, under current operational infrastructure and practices, the GHG emissions associated with Cenin cement replacement products, cradle to gate, are equivalent to 43kg of CO<sub>2</sub> per tonne of product. Cenin are in the process of building a renewable energy plant to provide its own heat and power which will further reduce the carbon footprint of its cement replacement products to approximately 16kg of CO<sub>2</sub>e per tonne of product.



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