



PRODUCT DATA SHEET

DP 63 – Cement Replacement

Description - DP 63 is a high efficiency class F pozzolanic material conforming to EN 450, BS 3892, IS 3812 and ASTM C618, obtained by selection and processing of power station fly ashes resulting from the combustion of pulverised coal. DP 63 is subjected to strict quality control.

General Information

Presentation	Finely divided dry powder
Colour	Light grey
Bulk Weight	Aprox. 0,90 metric ton per cubic meter
Specific density	Aprox. 2,30 metric ton per cubic meter
Particle size	90% < 45 micron
Particle shape	Spherical
Package	30 kg paper bags, 1 metric ton big-bags and bulk tankers

Recommended uses

Concrete	General purpose plain and reinforced structural concrete with 28 day strength levels up to M60 . Special purpose concrete, such as mass concrete, pre-cast concrete, pumpable concrete, self-compacting and self-levelling concrete.
Cement	To manufacture Blended cements (Portland Pozzolana Cement), such as sulphate resistant/marine resistant cement.
Mortar	General purpose mortar for plastering and brick/block gluing Specialised mortars for gluing floor/wall tiles. Flowable mortars for use as structural fill in earthworks.
Grout	General purpose grouts for use in earthworks for the treatment of rock cracks.

Grouts for earthworks to be used in anchors.

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Recommended dosages

The dosages of DP 63 and the other mix constituents should be determined by appropriate mix design testing. They will depend on required mix properties, cement grade and properties, admixtures used, etc. The following figures are indicative.

	Percentage of total binder	Dosage
Low grade concrete (up to 30 MPa)	35%	80 – 140 kg/m ³
Medium grade concrete (30-60 Mpa)	30%	100 – 150 kg/m ³
Pre-cast concrete	20%	60 – 80 kg/m ³
Mass concrete	50%	100 – 150 kg/m ³
Pumpable concrete	35%	90 – 120 kg/m ³
Self compacting/levelling concrete	40%	150 – 200 kg/m ³
Portland Pozzolana Cement	35%	
General purpose mortar (indoors)	33%	-----
General purpose mortar (outdoors)	17%	-----
Gluing mortars	25%	-----
Flowable mortars	30% - 95%	-----
Grouts for rock treatment	33%	-----
Grouts for anchors	17%	-----

Typical concrete performance – Replacement 1:1
(compared to plain PC mixes)

	Better	Similar	Worse
Water Demand	Reduced 5% - 8%		
Workability	Improved		
Setting Time	Increased 30 - 60 min		
Long Term Strength	Increased 15% -20%		
28 day Strength		Similar	
Early Strength (7 days)			Reduced 10% - 15%
Required Curing Period		Similar	
Permeability	Reduced 2 - 5 times		
Sulphate Attack	Reduced		

Chloride Penetration	Reduced		
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