

# Çimsa Master Power

## TECHNICAL DATA SHEET

### 1 GENERAL INFORMATION

**Çimsa Master Power CEM IV/B (P-Q) 32.5 N pozzolanic cement** comprises the Portland cement clinker, trass, calcined pozzolan, and gypsum in accordance with the TS EN 197-1:2012 standard. Workability, consistency, and finish properties have been enhanced for plaster-mortar applications.

#### Advantages in applications;

- With its low density, the product increases the yield in plaster-mortar productions.
- The product is resistant to moisture in exterior facade plasters due to its trass and calcined pozzolan content.
- The inclusion of a thin filling material reduces the risk of thermal cracks.
- The product exhibits resistance to cracking through its low shrinkage property in screed concretes.
- The product is compatible with building limes and plasticizing additives.
- The product adheres to the chromium (VI) guidelines, thereby reducing the risk of allergic dermatitis upon contact.
- As a sustainable product, it safeguards the environment, especially through the use of recycled content, reduced waste, and improved energy efficiency.

### 2 AREAS OF APPLICATION

**Çimsa Master Power pozzolanic cement** is suitable for use in various building applications such as plaster, mortar, leveling screed, coating, insulation, tile and ceramic adhesive.

### 3 PRODUCTION

Stability remains the focal point at Çimsa's production facilities, with the variability in product parameters minimized through controls conducted at each stage of the process, from raw materials to delivery. The production processes hold certifications compliant with EN ISO 9001, EN ISO 14001, EN ISO 50001, ISO 10002, and ISO 45001 standards.

### 4 CHEMICAL PROPERTIES

Properties	Çimsa Values	Standart Limit (EN 197-1)	
		Min.	Max.
Insoluble Matter	37 – 43		
SiO <sub>2</sub>	33,0 – 37,0	-	-
Al <sub>2</sub> O <sub>3</sub>	8,0 – 11,0	-	-
Fe <sub>2</sub> O <sub>3</sub>	2,6 – 3,0	-	-
CaO	35,0 – 45,0	-	-
MgO	1,3 – 2,0	-	-
SO <sub>3</sub>	2,7 – 3,2	-	3,5
Loss on Ignition	3,0 – 5,0	-	-
Na <sub>2</sub> O	0,8 – 1,20	-	-
K <sub>2</sub> O	0,8 – 1,10	-	-
Chloride (Cl)	0,02 – 0,05	-	0,10
Pozzolanic Feature	Provides the test	-	-

### 5 PHYSICAL AND MECHANICAL PROPERTIES

Properties	Çimsa Values	Standart Limit (EN 197-1)	
		Min.	Max.
Specific Gravity	2,85 gr/cm <sup>3</sup>	-	-
Specific Surface (Blaine)	4800-5300 cm <sup>2</sup> /gr	-	-
Initial Setting	180 -220 Minutes	75	-
Final Setting	230 – 280 Minutes	-	-
Water	%31- 33	-	-
Volume Constancy (Le Chatelier)	1,0 mm	-	10
0.045 mm Retained Material	%4 - 6	-	-
2-Day Compressive Strength	9,5-13 MPa	10,0	-
28-Day Compressive Strength	34-38 MPa	32,5	52,5

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### 6 QUALITY CONTROL

**Çimsa Master Power cement** undergoes quality control in accordance with EN 197-1 standards. The product is available in both domestic and foreign markets with a CE certificate.

### 7 SAFETY INSTRUCTIONS

We adhere to standard safety requirements for general cements. For more detailed information, please refer to the safety data sheet for **Çimsa Master Power cement**.

### 8 STORAGE CONDITIONS AND SHELF LIFE

**Çimsa Master Power** should be stored in dry and sheltered environments. This ensures the product retains its properties for a minimum of 6 months. Based on previous studies, the product has been observed to maintain its properties for over a year. Bagged products should not be stored for more than 3 months. It is advised not to stack more than 10 bags or 2 pallets on top of each other. The product must be stored in its original packaging, and the package should be tightly closed when not in use.

Çimsa Eskişehir Factory  
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