

Çimsa Master Power

TECHNICAL DATA SHEET

1 GENERAL INFORMATION

Çimsa Master Power (CEM IV-B(P-LL) 32.5 N) pozzolanic mineral additive cement comprises Portland cement clinker, natural pozzolan, limestone, and gypsum in accordance with the CPC-UTO-21/268 National Technical Approval. Workability, consistency, and finishing properties have been enhanced for plaster-mortar applications.

Advantages in applications;

- Due to its low density, the product increases yield in plaster-mortar production.
- The product's natural pozzolanic content renders it resistant to moisture in exterior facade plasters.
- The inclusion of a fine filler material reduces the risk of thermal cracks.
- The product's low shrinkage property makes it resistant to cracking in screed concretes.
- Utilization of the product is compatible with building limes and plasticizing additives.
- The product conforms to the chromium (VI) guidelines, reducing the risk of allergic dermatitis upon contact.
- The product stands as a sustainable product, safeguarding the environment through recycled content utilization, waste reduction, and enhanced energy efficiency.

2 AREAS OF APPLICATION

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

3 PRODUCTION

Stability is a cornerstone of Çimsa's production facilities. Variation in product parameters is minimized through controls enacted at each process stage, spanning from raw materials to delivery. The production processes are certified in accordance with EN ISO 9001, EN ISO 14001, EN ISO 50001, ISO 10002, and ISO 45001 standards.

4 CHEMICAL PROPERTIES

Properties	Çimsa Values	Standart Limit (CPC-UTO-21/268)	
		Min.	Max.
SiO ₂	18,0 – 23,0	-	-
Al ₂ O ₃	4,50 – 6,0	-	-
Fe ₂ O ₃	2,00 – 3,5	-	-
CaO	47,0 – 55,0	-	-
MgO	2,0 – 2,6	-	-
SO ₃	2,4 – 3,1	-	3,5
Loss on Ignition	12,0 – 19,0	-	-
Na ₂ O	0,3 – 0,7	-	-
K ₂ O	0,7 – 1,0	-	-
Chloride (Cl)	0,01 – 0,02	-	0,10
Pozzolanic Feature	Provides the test	-	-

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5 PHYSICAL AND MECHANICAL PROPERTIES

Properties	Çimsa Values	Standart Limit (CPC-UTO-21/268)	
		Min.	Max.
Specific Gravity	2,80 gr/cm ³	-	-
Specific Surface (Blaine)	5800-6600 cm ² /gr	-	-
Initial Setting	160 -190 Minutes	75	-
Final Setting	200 – 280 Minutes	-	-
Water	%29-31	-	-
Volume Constancy (Le Chatelier)	1,0 mm	-	10
0.045 mm Retained Material	%4 - 6	-	-
2-Day Compressive Strength	14,0-19,0 MPa	10,0	-
28-Day Compressive Strength	33-38 MPa	32,5	52,5

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6 QUALITY CONTROL

Çimsa Master Power cement undergoes quality control in accordance with CPC-UTO-21/268 National Technical Approval. The product is available in both domestic and foreign markets with a G conformity certificate.

7 SAFETY INSTRUCTIONS

Adherence to standard safety requirements for general cements is maintained. 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 that the product retains its properties for a minimum period 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. Stacking no more than 10 bags or 2 pallets on top of each other is advised. The product must be stored in its original packaging, and the package should be tightly closed when not in use.

