

1 GENERAL INFORMATION

According to the TS EN 197-1:2012 standard, **Çimsa Classic Pro 52.5** (CEM I 52.5 R) portland cement consists of only portland cement clinker and gypsum. The product is designed to achieve high ultimate strength in concrete.

Advantages in applications;

- The product provides high early strength, ideal for use in metro tunnels, precast applications to reduce formwork time. The product accelerates the manufacture of precast production.
- The product generates more heat of hydration, which is advantageous in cold weather, helps to reduce the effects of low ambient temperatures, and allows manufacturing.
- All typical concrete additives (e.g., plasticizing, air entraining, setting retarding additives) can be used with our CEM I 52.5 R cement.

2 AREAS OF APPLICATION

Some application areas of **Çimsa Classic Pro 52.5** portland cement, which is suitable for general use, are as follows:

- With its high ultimate strength, the product shall be used in the manufacturing areas such as building reinforcement projects, high-strength concrete, prefabricated, pre-stressed concrete, concrete traverse and thin-section reinforced concrete.
- With its reliable strength and stable color, the product shall be used in the production of construction chemicals and in the production of architectural concrete dominated by exposed concrete surfaces.

3 PRODUCTION

Stability is the focus of Çimsa production facilities, and variability in product parameters is minimized by controls carried out at every stage of the process, i.e., from raw materials to delivery. The production processes are certified according to EN ISO 9001, EN ISO 14001, EN ISO 50001, ISO 10002 and ISO 45001 standards.

4 CHEMICAL PROPERTIES

Features	Çimsa Values (%)	Standard Limits (EN 197-1)	
		Min	Max
Insoluble Residue	0.2-0.5	-	5.0
SiO ₂	19.0-21.0	-	-
Al ₂ O ₃	4.5-5.5	-	-
Fe ₂ O ₃	2.0-3.0	-	-
CaO	61-64	-	-
MgO	2-3	-	-
SO ₃	2.80-3.40	-	4.0
Loss on Ignition	2.0-3.5	-	5.0
Na ₂ O	0.2-0.4	-	-
K ₂ O	0.7-1.0	-	-
Chloride (Cl)	0.01-0.02	-	0.10

5 PHYSICAL PROPERTIES

Properties	Çimsa Values	Standart Limiti (EN 197-1)	
		Min	Max
Specific Weight	3.15 gr/cm ³	-	-
Specific Surface (Blaine)	3100-3500 cm ² /gr	-	-
Initial Setting	180-250 Minutes	45	-
Final Setting	240-290 Minutes	-	-
Water	%29-31	-	-
Soundness (Le Chatelier)	1.0 mm	-	10
0,045mm Residue on Sieve	%2-4	-	-
2-day Compressive Strength	30-34 MPa	30	-
28-day Compressive Strength	53-56 MPa	52.5	-

6 QUALITY CONTROL

Çimsa Classic Pro 52.5 cement is subjected to quality control in accordance with EN 197-1 standards. The product is offered in domestic/foreign markets with CE certificate.

7 SAFETY INSTRUCTIONS

Standard safety requirements for general cements are observed. For more information, please see the **Çimsa Classic Pro 52.5** cement safety data sheet.

8 STORAGE CONDITIONS AND SHELF LIFE

Çimsa Classic Pro 52.5 should be kept in dry and sheltered environments. Then, the product retains its properties for a minimum period of 6 months. Based on previous studies, the product was observed to retain its properties for more than a year. Bagged products should not be kept in storage for more than 3 months. No more than 10 bags or 2 pallets should be stacked on top of each other. The product must be stored in its original package. The package should be closed tightly when not in use.