



# TECHNICAL DATA SHEET

## 1 GENERAL INFORMATION

**Çimsa Super White Cement** (CEM I 52.5R) is preferred in more than 70 countries in the world with its stability and high strength.

The advantages offered by **Çimsa Super White Cement** to the Applications;

- High early and final strength,
- Fast production possibility,
- High whiteness,
- Low alkali content.

## 2 APPLICATION AREA

**Çimsa Super White Cement** application areas are;

- Construction chemical productions,
- Precast productions,
- Terrazzo tile productions,
- Pumice productions,
- Autoclaved aerated concrete productions,
- Exposed concrete.

## 3 PRODUCTION

Stability is the focal point of the Çimsa production plants and the variability in the product parameters is minimized by the controls at each stage during the process from raw material to delivery. Production processes are certified according to EN ISO 9001 and EN ISO 18001 standards.

## 4 PHASE COMPOSITION

**Main Mineral Phases** : C<sub>3</sub>S, C<sub>2</sub>S

**Auxiliary Mineral Phases:** C<sub>3</sub>A

## 5 WHITENESS

Whiteness of **Çimsa Super White Cement** is done according to L, a, b, and Y values with regard to Hunter Lab systematic.

<b>L (Brightness)</b>	92,2
<b>a (Greenness)</b>	-1,65
<b>b (Yellowness)</b>	2,90
<b>Y (Whiteness)</b>	85,0

## 6 CHEMICAL FEATURES

Features	Çimsa Values	Standart Limits (EN 197-1)	
		Min.	Max.
Insoluble Residue	% 0,18	-	-
SiO <sub>2</sub>	% 21,6	-	-
Al <sub>2</sub> O <sub>3</sub>	% 4,05	-	-
Fe <sub>2</sub> O <sub>3</sub>	% 0,26	-	-
CaO	% 65,7	-	-
MgO	% 1,30	-	-
SO <sub>3</sub>	% 3,30	-	4,0
Ignition Loss	% 3,20	-	5,0
Na <sub>2</sub> O	% 0,30	-	-
K <sub>2</sub> O	% 0,35	-	-
Klorür (Cl <sup>-</sup> )	% 0,01	-	0,1
Free CaO	% 1,60	-	-

## 7 PHYSICAL AND MECHANICAL FEATURES

Features	Çimsa Values	Standard Limits (EN 197-1)	
		Min.	Max.
Specific Gravity	gr/cm <sup>3</sup> 3,06	-	-
Blaine	cm <sup>2</sup> /gr 4600	-	-
Whiteness Y	% 85,5	85,0	-
Vicat Initial Set	Dakika 100	45,0	-
Vicat Final Set	Dakika 130	-	-
Water	% 30,0	-	-
Volume Stability (Le Chatelier)	mm 1,0	-	10,0
Residue at 45 (microns)	% 1,0	-	-
Residue at 90 (microns)	% 0,1	-	-
Compressive Strength (2 days)	MPa 37,0	30,0	-
Compressive Strength (7 days)	MPa 50,0	-	-
Compressive Strength (28 days)	MPa 60,0	52,5	-

## 8 QUALITY CONTROL

**Çimsa Super White Cement** is subject to quality control conforming to EN 197-1 standards. It is presented to foreign markets with CE certificate.

## 9 QUALITY CONTROL

Standard safety requirements related to general cement are obeyed. For more information, please see **Çimsa Super White Cement** Safety Data Sheet.

## 10 STORAGE CONDITIONS AND SHELF LIFE

**Çimsa Super White Cement** must be stored in dry and sheltered conditions. In this case, it will retain its properties for at least 6 months. Experience has shown that it keeps its properties for more than one year. The height of stack should not be more than 2 pallets or 10 bags. The product should be contained in its original package. Package should be kept tightly when not in use.