

ECOWHITE

TECHNICAL DATA SHEET

1 GENERAL INFORMATION

Çimsa **Eco White Cement** (CEM II/B-L 42.5R) is one of the cements with high whiteness. It is an environmentally friendly cement with low clinker amount due to the marble in its content.

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

- High whiteness,
- Low CO₂ emission,
- High durability,
- Low alkali content,
- High volume stability.

2 APPLICATION AREA

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

- Construction chemicals production,
- Glass fibre-reinforced concrete production,
- Terrazo tile production,
- 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 : C₃S, C₂S

Auxiliary Mineral Phases: C₃A

5 WHITENESS

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

L (Brightness)	93.25
a (Greenness)	-1.45
b (Yellowness)	2.90
Y (Whiteness)	86.5

6 CHEMICAL FEATURES

Features	Çimsa Values	Standart Limits (EN 197-1)	
		Min.	Max.
Insoluble Residue	0.12 %	-	-
SiO ₂	17.50 %	-	-
Al ₂ O ₃	3.30 %	-	-
Fe ₂ O ₃	0.21 %	-	-
CaO	63.50 %	-	-
MgO	1.15 %	-	-
SO ₃	2.80 %	-	4.0
Ignition Loss	11.5 %	-	-
Na ₂ O	0.25 %	-	-
K ₂ O	0.27 %	-	-
Chlorine (Cl)	0.0080 %	-	-
Free CaO	1.80 %	-	0.1

7 PHYSICAL AND MECHANICAL FEATURES

Features	Çimsa Values	Standart Limits (EN 197-1)	
		Min.	Max.
Specific Gravity	g/cm ³ 3.00	-	-
Blaine	cm ² /g 5500	-	-
Whiteness Y	86.5 %	-	-
Vicat Initial Set	Minute 110	60.0	-
Vicat Final Set	Minute 135	-	-
Water Volume	28.6 %	-	-
Stability (Le Chatelier)	mm 1.0	-	10.0
Residue at 45 (microns)	1.5 %	-	-
Residue at 90 (microns)	0.1 %	-	-
Compressive Strength (2 days)	MPa 28.0	20.0	-
Compressive Strength (7 days)	MPa -	-	-
Compressive Strength (28 days)	MPa 48.0	42.5	62.5

8 QUALITY CONTROL

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

9 SAFETY INSTRUCTIONS

Standard safety requirements for general cements are followed. Please refer to the **Eco White Cement** Safety Data Sheet for more information.

10 STORAGE CONDITIONS AND SHELF LIFE

Çimsa **Eco White Cement** must be stored in dry and sheltered conditions. In this case, it will retain its properties for at least 6 months. Based on earlier studies, it has been observed to maintain its properties for more than a year. No more than 10 bags or 2 pallets should be stacked in a row. The product must be stored in its original package. In cases where it is not used, the mouth of the package must be tightly closed.