



ALICANTE PLANT (SPAIN)



CEMEX España Operaciones S.L.U.

AVERAGE CHARACTERISTICS OF GREY CEMENT TYPE CEM II/B-M(S-LL) 42,5 R
MANUFACTURATED BY ALICANTE PLANT ACCORDING TO:

UNE-EN 197-1:2011

- CERTIFICATE OF CONSTANCY OF PERFORMANCE CE Nr 0099/CPR/A33/1107 -

SHIPPED IN: **CEMBROOK**

B/L DATE: January 14th, 2022

QUANTITY LOADED: 833,09 Tn

| CHEMICAL CHARACTERISTICS | AVERAGE VALUE | IN ACCORDANCE TO UNE-EN 197-1:2011 |
|------------------------------------|---------------|------------------------------------|
| Sulfur Trioxide (SO ₃) | 3.59 | ≤ 4 % |
| Chloride (Cl) | 0.05 | ≤ 0.10 % |

| MECHANICAL CHARACTERISTICS | AVERAGE VALUE | IN ACCORDANCE TO UNE-EN 197-1:2011 |
|----------------------------------|---------------|------------------------------------|
| VICAT TS - Initial | 200 | ≥ 60 min |
| Le Chatelier Soundness Expansion | 1 | ≤ 10 mm |

| COMPRESSIVE STRENGTH | AVERAGE VALUE | IN ACCORDANCE TO UNE-EN 197-1:2011 |
|----------------------|---------------|------------------------------------|
| 2 days | 24.5 | ≥ 20 N/mm ² |
| 28 days | xx.x* | ≥ 42.5 N/mm ² |

| OTHER CHARACTERISTICS** | AVERAGE VALUE | INTERVAL |
|--------------------------------|---------------|-----------|
| Residue on 45µm sieve (% mass) | 5.8 | 5.5 – 6.5 |

Note: Values to be fulfilled by the sample representing the shipment.

Note*: Estimated value. To be communicated once it is known.

Note**: Additional non-normative characteristics.

Sign: Oscar Nasarre Español



Date: **20/01/2022**