CBGM-5 – Low Density Non-Shrink Grout

For Offshore Suction Bucket Foundations

Product Description

CBGM-5 is a low density non-shrink grouting material developed for offshore wind suction bucket foundations. It provides buoyancy, long flow retention, volume stability and durability under marine and tidal environments. The pre-mixed dry mortar only requires the addition of clean water on site.

Key Features & Benefits

- Low Density – bulk density 680–750 kg/m³, reducing grout weight.
- High Buoyancy – suitable for suction bucket installation in offshore wind projects.
- Long Flow Retention – fluidity ≥ 150 mm after 8 h, ensuring continuous placement.
- Volume Stability – 24 h free shrinkage = 0, reliable in tidal and marine conditions.

Performance Parameters

Test Item	Technical Index	Test Standard
Appearance	Gray powder	Visual
Bulk density (kg/m³)	680–750	GB/T 5486
Apparent density (kg/m³)	1300–1500	GB/T 50080
Initial fluidity (mm)	≥ 290	GB/T 50448
Retained fluidity 30 min (mm)	≥ 260	GB/T 50448
Retained fluidity 60 min (mm)	≥ 230	GB/T 50448
Retained fluidity 240 min (mm)	≥ 200	GB/T 50448
Retained fluidity 480 min (mm)	≥ 150	GB/T 50448
Bleeding rate (%)	0	GB/T 50448
24 h free shrinkage (%)	0	GB/T 50080
7 d compressive strength (MPa)	≥ 0.2	GB/T 17671
28 d compressive strength (MPa)	≥ 0.5–5	GB/T 17671

Product Usage

- Special grout for suction bucket foundations in offshore wind farms.
- Marine engineering grouting under tidal or underwater conditions.
- Pour continuously from one side to avoid air entrapment; complete grouting within 10 min after mixing.

Packaging & Storage

- 25 kg moisture-proof bags; shelf life: 6 months in cool, dry and ventilated storage.
- Protect from moisture during transport and storage.

Disclaimer

The information in this Technical Data Sheet is based on laboratory tests and field experience and is offered in good faith. Sino-sina Building Materials Co., Ltd. makes no warranty of results obtained under conditions beyond its control. Users should conduct trial mixes and confirm the suitability of the product for their specific applications.