



打造中国建材值得信赖品牌
CREATE A TRUSTWORTHY BRAND OF CHINA
BUILDING MATERIALS



EGM-100

环氧树脂灌浆料

Epoxy resin grouting material

Provider of comprehensive solutions
for concrete disease control



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● Website: www.wcrete.com

EGM-100 epoxy resin grouting material includes three components: A (resin), B (hardener), and C (filler). This product uses high-quality resin and refined filler, 100% solid content, and does not contain volatile substances such as solvents that are harmful to the human body. After the three components contained in each group of materials are completely mixed at room temperature, they can be used without adding additional ingredients.

1 Product Features

1. High strength and early strength: It can provide early strength with much higher mechanical properties such as compression and bonding than cement-based materials.
2. Low exotherm peak: can provide up to 120 minutes (25°C) of operation time, suitable for large volume grouting.
3. No shrinkage: Ensure that the grouting layer is in full contact with the bearing surface after final formation, ensuring high accuracy of equipment installation.
4. Excellent anti-creep performance: Epoxy grouting materials can be used for a long time in harsh physical conditions of freeze-thaw alternating vibration and pressure at -50°C to +80°C without plastic deformation, ensuring long-term accurate positioning of equipment.
5. Excellent toughness: Epoxy grouting material can dissolve any dynamic load transmitted by dynamic equipment that may cause the cement-based grouting layer to burst.
6. Corrosion resistance: can withstand long-term contact corrosion from chemicals such as acid, alkali, salt, grease, etc

2 Scope of application

1. Secondary grouting installation of high vibration equipment such as compressors, pumps, presses, crushers, ball mills, etc.
2. Grouting of equipment foundation areas susceptible to chemical corrosion.
3. Grouting in areas subject to strong pressure, such as track foundations and bridge support seats.
4. Anchor bolts, steel bar planting and concrete reinforcement of building structures.
5. Use as self-leveling mortar on concrete, stone, steel, wood and other surfaces.
6. Rigid connections of iron, iron tie rods and tie rods.

3 Performance Indicators

Project	Performance Indicators	
Fluidity(mm)	≥230	
A+B(100g) Curing time(min)	50~70	
Compressive strength (MPa)	1d	≥50
	3d	≥65
	7d	≥95
Flexural strength(MPa)	7d	≥20
Bond strength(MPa)	With concrete	≥3
Density kg/L(A+B+C)		2.1~2.2

4 Construction process

1. Prepare

The surface of the concrete surface that contacts Egm-100 must be chiseled off to expose the solid base to ensure that the grouting surface is clean, dry and grease-free. The outer edge of the concrete joint surface is ground with a 25mm thick chamfer to increase the bonding area between the grouting material and the foundation at the edge; the metal surface to be bonded should be free of rust (meet the finish requirements of SSPC-SP6).

2. Moulding

The template must be solid and firmly overlapped. Grease, wax or PVC tape should be applied to the inside to facilitate demoulding. To facilitate pouring and installation of the grouting funnel, leave at least 100mm between the grouting side template and the equipment base, and be 100mm higher than the equipment bottom plate. Nail a 25mm thick 45-degree bevel wood line at the grouting level on the inside of the template to avoid stress concentration at the edge of the cast body.

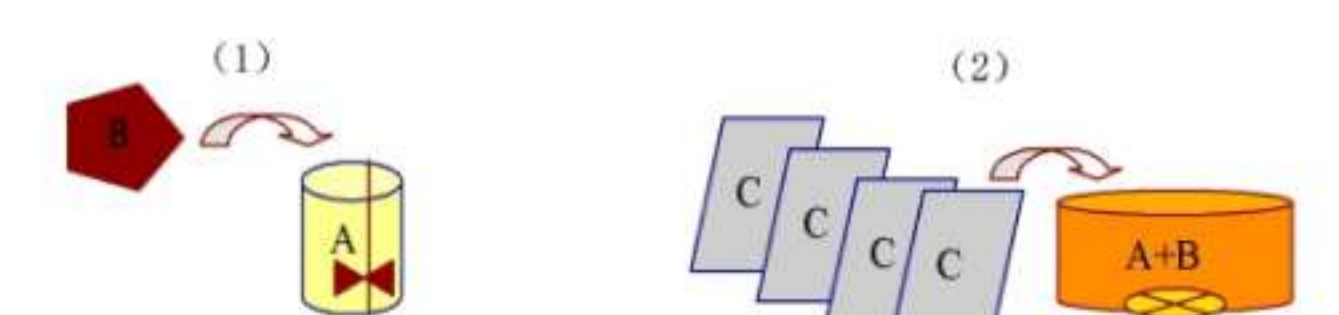


3. Construction temperature

The ambient temperature includes the surface and air temperature. To obtain the best working condition, it is best to place the material in an environment of 15-25°C for 24 hours before grouting; during construction and in the following 24 hours, the ambient temperature should be controlled at 5-32°C, with 20°C being the most suitable. Avoid high temperatures at noon during summer construction, and build a sunshade if necessary; when the temperature is low in winter, a warm shed should be built in the grouting area to increase the temperature and ensure that the construction environment temperature is greater than 5°C. Construction should be carried out at noon.

4. Mix

- 1) Use a handheld mixer (200-250rpm) to mix A (resin) and B (hardener) thoroughly for about 3 minutes;
- 2) Add C (filler) to the low-speed high-power mixer (15-20rpm) and mix it with the mixture of A and B. Stir thoroughly until all the aggregates are soaked, which takes about 5-10 minutes.
- 3) When the temperature is low, in order to ensure the fluidity of the mixture, the amount of C (filler) can be appropriately reduced (up to 1/2 of the material)



5. Grouting

1) Grouting should be done from one side to the other; during the grouting process, it can be squeezed but not vibrated to avoid air inclusions; when the grouting distance is greater than 1.5m, the high-position funnel method should be used to assist the grouting by using the principle of gravity pressure difference. The grouting work must be completed continuously and as quickly as possible;

2) The thickness of a single grouting should be controlled between 25mm and 350mm. When the grouting area exceeds 1.8mx1.8m, expansion joints should be reserved in the grouting area: The depth of a single bolt hole grouting can reach 1500mm.

6. Check for density

After grouting, use a hammer to knock on the equipment base plate: a ding-ding sound indicates that the grouting layer is dense, and a dong-dong sound indicates that the grouting layer is hollow.

7. Surface finishing and demolding After grouting and before the initial setting of EGM100, in order to achieve an aesthetic effect, the exposed surface can be finished with a putty knife; after final setting, the mold can be removed, and the grouting tools can be cleaned with water or solvent after the construction is completed. Initial setting: 3h at 18°C; 2h at 25°C; 1.5h at 32°C Final setting: 72h at 18°C; 48h at 25°C; 36h at 32°C

8. Construction safety

The resin part of this product is a low-toxic formula, but it is still slightly irritating. When using it, you should avoid inhaling a large amount of steam or long-term contact with the skin; when using it, you should pay attention to wearing necessary protective equipment and keep the environment ventilated. After contact with the skin, it should be washed immediately. If it splashes into the eyes, rinse it immediately with plenty of water.

5 Packaging and storage

Epoxy resin grouting material can be stored for at least 18 months at room temperature and dry conditions. 200kg/group, according to the mix ratio A:B:C=3:1:20.