

KEM GROUT CI 2

Cementitious all Fines Pumpable Grout

Ref. GA/CG-V1-0613

Description

KEM Grout CI 2 is supplied as powder form and requires only the addition of water to produce a grout of free flowing consistency.

KEM Grout CI 2 expands in both the plastic and hardened states, thus eliminating chances of shrinkage.

It contains a blend of portland cement, silica fume, plasticizers and selected expansive agents. High early strength and long lasting durability.

Uses

- Grouting of cable ducts in post tensioned concrete members..
- Grouting crane rails.
- Injecting or filling narrow concrete cracks.
- Grouting gaps between concrete and metal structures.
- Grouting metal lighting pole bases.
- It is used for cable duct grouting in post tensioned concrete members.

Advantages

- Non Shrink.
- Pre packed material eliminates possibility of site batching errors.
- Can be easily pumped in small gaps and for long distances.
- Use to high Early Strength gain: Ensures rapid installation and faster operations.
- No metallic Iron.
- Free from Chlorides.

Typical Properties

Compressive Strengths as per ASTM C-109, cubes casted and kept under restraint for 24Hrs.

Age (days)	Compressive Strength (N/mm ²) at 25°C flowable
1	18
7	40
28	60

Flexural Strength: ASTM C-580 at 25 °C: 8.5 N/mm² at 28 days.

Wet Density: 2050 kg/m³

The mixed grout will flow into narrow gaps and can also be pumped into gaps between prestressing tendons in cable ducts.

Expansion Characteristics: Plastic state expansion of 1 to 2 % as per ASTM C 827 overcomes plastic settlement. Expansion in the hardened state when measured according to ASTM C 1090– 88 compensates for drying shrinkage.

Time for Expansion: Initial expansion in the plastic state begins after 15 minutes at 25°C and is completed at initial set. Expansion in the hardened state is complete after 72 hours. Temperatures above 25°C may slightly reduce these times and temperatures below 20°C, may prolong the start of expansion process.

Standards

ASTM C – 827, ASTM C – 1107, ASTM C-109.

Direction for use

Surface Preparation: Remove all dirt, grease, oil by light grit blasting or scabbling. Use of degreaser or acid etching may be required, if the contamination is high. All loose particles and dust may be cleaned with oil free compressed air.

Pumping: Any standard grout pump including diaphragm, piston and gear pump may be used. Ensure a constant supply of grout to the pump.

Mixing: Place required water in the mixer (7 – 8 litre for flowable consistency). Gradually add 25 kg. of KEM Grout CI 2 under slow speed mixing. Use electrical drill fitted with mixing paddle or a mechanical mixer. Mix for 3 to 5 minutes after



complete powder has been added. Check for any lumps. Break all lumps using gloved hands.

Placing: Pour grout from one side only and always from the longer side, maintaining hydrostatic head with continuous supply of grout until the grout appears from the adjacent pouring port or at the end form. Refer to cementitious grouting guide for further help.

Alternatively grout can be pumped into position. When grout is set, cure exposed surfaces with a curing membrane after trimming to agreed profile.

Packaging

It is available in 25 kg bag.

Coverage

A 25 kg bag will yield approximately 16 ltrs. of pumpable free flow consistency grout. Allowance should be considered for wastage in filling uneven surfaces or in grouting concrete cracks or sealing gaps

Storage and Shelf life

Storage: store in dry conditions at moderate temperature and humidity.

Shelf Life: 12 months

Technical Service

Chembond has established itself in various fields on the basis of its dependable technical service. For this purpose, we maintain a well equipped laboratory for research & quality assurance of all products. Our experienced personnel are always on call and would always be available for product demonstrations and product performance monitoring.

Safety Precautions

Cleaning: All equipment must be cleaned with water immediately after use. Mixes containing this product must not be emptied into drainage system.

Protection: Protect from rain, heavy winds and frost, until fully hardened.

Fire Resistance: KEM Grout CI 2 is not flammable.

It is non toxic but is mildly alkaline. It is advised to wear gloves during application. Splashes to the skin or eyes should be cleaned with clean water. If irritation persists, seek medical advice.

Chembond Chemicals Limited

Chembond Centre, EL-71, MIDC,
Mahape, Navi Mumbai, India 400 710.
Tel.: +91 22 3921 3000, Fax: +91 22 3921 3100
website: www.chembondindia.com,
e-mail: enquiries.conschem@chembondindia.com

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