

TECHNICAL DATA SHEET

k-Kenal Grout HS High-Early Strength/Bearing Grout

DESCRIPTION

Kenal Grout HS is a cementitious, non-metallic, non-shrink and high early strength micro concrete grout. It is supplied as a ready to use pre-bagged dry powder, which requires only the on-site addition of water.

It is made of Ordinary Portland Cement (OPC).

This non shrink grout is applicable for the grout gap thickness range of 10 – 100 mm

TYPICAL USES

Kenal Grout HS is a high strength grout designed for grouting, bedding and bearing operations such as:

- Generators
- Crain rails
- Pre cast elements
- Anchor bolts
- Flanged lighting column
- Stanchion bases
- Milling machines
- Bridge bearing grout

ADVANTAGES

- ❖ High early compressive strength
- ❖ Excellent workability retention
- ❖ High bond strength to steel and concrete
- ❖ Low permeability ensures durability
- ❖ Can be poured or pumped

PACKAGING

25 kg. Bags

PROPERTIES

The physical properties shown below were obtained under laboratory conditions at 23°C ± 2°C with w/p ratio of 0.14, and may vary in practice.

Mixed Density	1.97 ± 0.05 ton / m ³
Compressive Strength (ASTM C 109)	1 day: >40 N/mm ² 7 days: >65 N/mm ² 28 days: >80 N/mm ²
Flexural Strength (ASTM C 580)	7 days: >8.0 N/mm ²
Tensile Strength (ASTM C 307-18)	7 days: >5.0 N/mm ²

STANDARDS

ASTM C 1107, Grade B

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

The surface to be grouted with **Kenal Grout HS** should be clean, scabbled and all contaminants such as grease, paint, oil, laitance. Any contamination should be removed by mechanical means to produce a sound substrate. Soak area to be grouted, should be flooded with fresh water for 24 hours prior to grouting to minimize absorption and assist in the free flow of the grout. Surface should be damp but free from standing water. Particular attention should be paid to bolt holes to ensure that these are water-free.

Base plate, bolts, etc. must be clean and free from contaminations that could impair adhesion.

MIXING

A mechanically powered mixer should be used for mixing of **Kenal Grout HS**, ensure that the mixer is damp inside but free from standing water before commencing mixing. Add pre measured quantity of clean water.

Kenal Grout HS should be slowly added to the mixer while stirring continuously for at least three to five minutes or until a uniform consistency is achieved. Mix **Kenal Grout HS** with 2.8 – 3.75 liters of water per 25 kg bag to obtain the required consistency.

APPLICATION

Kenal Grout HS should be placed within 15 minutes of mixing. For horizontal application, it should be poured continuously and formwork should be tamped gently. For vertical application such as boreholes, the grout should be poured/injected starting from the top and should continue until the borehole is full. The entrance should then be plugged. Keep the surfaces exposed to the atmosphere restrained.

Kenal Grout HS may be placed in thicknesses up to 100 mm in single layer.

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For thickness above 100 mm, **Kenal Grout HS** can be mixed with hard, clean, surface saturate dry (SSD) graded 10 mm aggregates in the ratio of 1:1 or 1:0.5 by weight depending on consistency required.

CURING

Immediately after placing **Kenal Grout HS**, cover all exposed grout with clean damp hessian and keep moist until grout is firm enough to accept a curing membrane to prevent loss of water which may result in cracking.

COVERAGE

12.5 litres / 25 kg bag at 3.5 litres water addition.

STORAGE

Store out of direct sunlight, clear of the ground on pallets, protect from rainfall. Avoid excessive compaction. Shelf life is 12 months when stored as above.

PRECAUTIONS

As with other products containing Portland cement, the cementitious material in **Kenal Grout HS** may cause irritation. In case of contact with eyes, immediately flush with plenty of water for at least 15 minutes. Call a physician. In case of contact with skin, wash skin thoroughly.