

YASH Grout-I



YASH GROUT-1

(General purpose non-shrink cementitious grout)

Description

YASH GROUT-I is pre-mixed, pre-packed chloride free cementitious grout. It contains cement, selected additives, well graded, and non-reactive aggregates and is designed to give excellent flow properties, shrinkage compensation, frost resistance, and high compressive strength.

Applications:

YASH GROUT-I is ideally designed for use in the following applications:

- + Machine beds.
- + Stanchion bases, struts, railings, and guardrail assemblies.
- + Filling of shutter tie rod openings.
- + Anchoring of tie bars, and bolts.
- + Pile top re-profiling.

Advantages:

- + Good non-shrinkage characteristics.
- + Extremely dense and low permeability.
- + High early strength development allowing for rapid installation.
- + High flow can be poured or pumped into variable gap widths down to 10 mm.
- + Easy to apply, single component which require only addition of water.

Method of Use

Substrate Preparation

- + The Substrate should be sound, clean and free from contamination. Surface Laitance should be removed by acid etching.
- + All surfaces should be soaked with water enough to reach saturated surfaces prior to grouting.
- + A water tight formwork should be erected to avoid any grout loss.

Mixing

+ The addition of 4.25 litre of clean water per 25 kg bag is essential to obtain a flow able consistency and to achieve the mentioned technical properties. Yet to use in horizontal situations such as filling in tie rods opening, the addition of 3.5 litre of clean water per 25 kg bag should be used to achieve a pourable consistency.

+ To ensure proper mixing, a mechanically powered mixer or drill fitted with suitable paddle should be used.

+ A 4.25 litre of clean water should be added to clean container. The 25 kg powder is then added slowly to the water while mixing continuously with low speed mixer/drill (400 - 600 rpm). Mixing time should be continued for 3 minutes until uniform flow able consistency is obtained.

TECHNICAL PROPERTIES:

Compressive strength: ASTM C109/109M-11	≥ 20 MPa @ 1 day ≥ 35 MPa @ 3 days ≥ 45 MPa @ 7 days ≥ 55 MPa @ 28 days
Flexural strength: BS6319, Part 3 : 1990	≥ 7 MPa @ 7 days ≥ 8 MPa @ 28 days
Color	Grey
Expansion Characteristics ASTM C827/C827M-10	0.5-3%
Fresh wet density:	2.2 ± 0.1 g/cm ³
Application Temperature	5-40°C
Service Temperature	-20-200°C

Notes: Typical proper ties @ 4.25 litre/25 kg @ 25 °C.
Compressive strength @ 1 day is under restrain.
Compressive strength and Flexural strength @ 7 & 28 days are under wet cure @ 25°C.

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Placing and Finishing Under Base plate:

Enough material should be available to achieve continuous fill and to complete the work. Pouring of the mixed grout should be started from one side only to avoid air entrapment. To obtain maximum flow distance, a side shutter feed between 100 mm to 250 mm high should be erected and used to build the required head.

Formwork:

As the mixed grout possesses high fluidity characteristics, all formwork and shutters should be water tight. This can be obtained by sealing underneath the formwork and at the joints by using an appropriate mastic. The unrestrained areas should be kept to a minimum due to the expansive nature of YASH GROUT-I

Curing

Since YASH GROUT-I is a cementitious based material, it should be treated in a manner similar to concrete. Curing can be conducted by either using concrete curing compound such as YASH SEAL 22 or by using wet hessian and polyethylene.

Notes:

✦ At low temperatures (below 8°C), warm water is recommended to achieve the early strength. And the formwork is recommended to be kept longer time.

At high temperatures (35°C and above), cold water (less than 20°C) must be used for mixing.

Cleaning

All tools should be cleaned immediately after finishing by clean water. Hardened materials can be cleaned mechanically.

Packaging

YASH GROUT-I is available in 25 kg bags.

Thicknesses and Size Limitations

YASH GROUT-I can be applied in a single layer at thickness

between 10 -100 mm. For greater thickness, an 8 -12 mm washed aggregate should be added at a ratio between 50 -70% from the YASH GROUT-I.

Yield

Approximately 13 -13.5 litre/25 kg bag depending on consistency

Storage

YASH GROUT-I has a shelf life of 12 months from date of manufacture if stored at temperatures between 2°C and 50°C. If these conditions are exceeded, YASH Technical Department should be contacted for advice.

Cautions

Health and Safety

Since it is powder containing Portland cement and sand, YASH GROUT-I may cause irritation to skin or eyes.

In case of accidental contact with eyes, immediately flush with plenty of water for at least 10 minutes and seek medical advice. For further information refer to the Material Safety Data Sheet.

Fire

YASH GROUT-I is nonflammable.

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A wide range of construction chemical products are manufactured by YASH which include:

- Concrete admixtures.
- Surface treatments
- Grouts and anchors.
- Concrete repair.
- Flooring systems.
- Protective coatings.
- Sealants.
- Waterproofing.
- Adhesives.
- Tile adhesives and grouts.
- Building products.
- Structural strengthening.

Note : We endeavor to ensure that any advice, recommendation or information we may give in product literature is accurate and correct. However, due to the fact that we have no direct or continuous control over where or how the products are applied, Yash cannot accept any liability either directly or indirectly arising from the use of Yash products, whether or not in accordance with any advice, specification, recommendation or information given by us.