



# SAMCRETE® HS GROUT (CEMENT-BASED) (HIGH STRENGTH)







# **DESCRIPTION:**

SAMCRETE® HS (High Strength) Grout (Cement-based) renders durable and trouble-free foundation
for industrial machinery and other grouting needs. It is a design mix of portland cement, graded fillers
and chosen chemical additives to impart strength and flow and also to compensate dual shrinkage
and to ensure effective contact and support.

## **GENERAL SPECIFICATIONS:**

• Grain size: 0-2 mm

• Water content (%): 15-18

• Linear expansion (maximum %):

Free: 3.0 Restrained: 1.5

• Time for expansion (after mixing):

**Start:** 20 minutes **Finish:** 120 minutes

• Yield (50 kgs dry grout): 25 litres slurry

### **ADVANTAGES:**

- Gaseous expansion system compensates for shrinkage problems and maintains its original volume during curing.
- Control expansion ensures surface contact after setting.
- Develops exceptionally high ultimate strength combined with dense impermeable structure.
- Provides trouble-free performance.
- Facilitates rapid installation and early operation of plant.
- No metallic iron content to corrode and cause staining or deterioration due to rust expansion. This grout also imparts high frost, fire and oil resistance.

# METHOD OF USE:

- Mix dry grout with recommended quantity of water for minimum 3 minutes.
- · Water quantity per bag of 25-kg grout:

Flowable: 4.125 litres Trowellable: 4.0 litres

# RECOMMENDED APPLICATIONS:

- Industrial machinery foundations
- Drill holes in rock and concrete structures
- · Stabilization of rock structures and embankments
- · Anchoring of bridge bearings etc.
- Base Plate grouting of steel stanchions, steel trusses etc.

**SAMCRETE® HS** is recommended for use in heavy machinery foundations with dynamic loads as well as other special applications.

Special grades of SAMCRETE® HS can also be designed to suit specific needs of special applications.

#### SAMCRETE® HS is extensively used for the following:

Boilers
 \* Process line equipments for industries

• D G Sets \* Chemicals \* Textiles

Compressors \* Petrochemicals \* Paper

• Pumps \* Plastics \* Steel

Furnaces \* Engineering industry \* Mining \* Minerals

• Cranes \* Rubber & Tyres \* Electrical & Electronics

Drilling platforms \* Agro industry \* Automobiles \* Glass

• Turbines \* Fertilizers \* Power sector

It is recommended not to mix grout with concrete admixtures. Also recommend not to batch-grout by fraction of a bag.

CONSULT OUR PRODUCT APPLICATION DEPARTMENT (PAD) IN CASE OF ANY DIFFICULTY OR FOR TECHNICAL ASSISTANCE

SAMROCK products are guaranteed for the performance of material and manufacture.

The details given here are based on our laboratory and field observations and as such as construed to be reliable. But we shall not accept responsibility for any work carried out with our material as we do not have control over other ingredients, workmanship and field conditions. This data sheet is subject to change in view of constant research and development being undertaken in our laboratories. Customers are advised to contact SAMROCK for the latest version.

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# PRODUCT DATA:

Form	Powder-grain mix (fillers)
Base	Cement
Bulk density	2200 kg/m³
Colour	Grey
Curing	7 days (minimum)
Compressive strength (N/mm²) (IS 516-1959) W/P ratio 0.165	Age (days)  Consistency Flowable (W/P 0.165)
	1 24
	3 40
	7 55
	28 65
Flexural strength (W/P - 0.165)	10 N/mm² @ 28 days
Tensile strength (W/P - 0.165)	3.5 N/mm² @ 28 days
Pullout bond strength (W/P - 0.165)	17 N/mm² @ 7 days 20 N/mm² @ 28 days
Young's modulus	28 KN/mm²
Caution	Restrict mixing to quantities, which can be placed in 10 to 15 minutes.
Storage	In dry and close place
Safety	Non-toxic and non-flammable
Packing	25 kg HDPE bags

# **SURFACE PREPARATION:**

- Clean the concrete base (like bolt pocket) of dirt, debris, oil and grease etc.
- Wet the surface thoroughly.
- Remove all excess and free water.

## **PLACEMENT:**

- Place or pour grout mix quickly and continuously through holes or from one side only.
- Spread and compact by rodding, only if required.
- Do not place or pour grout from two or more sides for good ensured quality.
- In order to minimize heat build-up in thicker sections, it is recommended to add up to 50% well graded silt-free 10mm aggregate.

# **CURING:**

- Curing should be started immediately after 6 hours from the time of placements of grout.
- Cure for minimum seven days by ponding water or with wet hessian cloth.
- Cover top and stray holes / openings of restraint formwork with wet sacks for minimum seven days.