

# INDUGROUT-GP

## GENERAL PURPOSE, NON-SHRINK, CEMENTITIOUS GROUT

### Product Description:

INDUGROUT-GP is a ready-to-use general purpose, high strength, non-shrink, cementitious grout which only requires the addition of water to produce a non-shrink flowable mortar. INDUGROUT-GP contains a blend of selected Portland cements, special aggregates, modifiers and shrinkage compensating materials that work during both the plastic & post hardened states. INDUGROUT-GP is designed for application by pouring or pumping in thicknesses between 10 mm & 80 mm. INDUGROUT-GP does not release any gases during its plastic or hardened states.

### Primary Uses:

INDUGROUT-GP is typically used for:

- Grouting anchor bolts.
- Grouting bridge bearings.
- Grouting of structural elements such as precast wall, beams, columns etc.
- Grouting anchor bolts, crane rails and milling machines.
- Structural concrete repairs.
- Grouting of generators & turbines.
- Heavy stanchion bases and base plates of reciprocating machines.

### Advantages:

- Easy to mix and apply.
- Designed for hot weather applications.
- Non-oxidized, non-shrink.
- Does not contain gas releasing agents.
- Resistant to water and water-borne salts.

- Adjustable consistency.
- High mechanical properties.
- Low permeability extends durability & service life.
- High early and ultimate strengths.
- Chloride-free, nitrate-free & non-toxic.
- Excellent bond to concrete and steel.
- Excellent heat resistance.
- Can be applied in a single layer at thickness of up to 80 mm.

### Standards:

INDUGROUT-GP is formulated to comply with all requirements of ASTM-C-1107: "Packaged dry, Hydraulic- Cement Grout (Non-Shrink)" Grade B.

### Technical Properties:

Appearance	: free flow grey Powder
Consistency	: Flowable Fluid
Mixing water (ltr)	: 3.5 3.75
Yield/bag (ltr)	: 12.5 13
Mixture density (kg/l) at +20°C	: 2.3 2.2
Setting times (influenced by ambient temp.)	: Initial 3-4 hrs Final 5-6 hrs
Flow CRD C-cone (Flowable consistency)	: 2min Nil
Chloride content (%)	: No expansion during the plastic state.
Expansion at 28 days	: +0.01%

Compressive Strength (N/mm <sup>2</sup> )	: Flowable	Fluid
At 24 hours	24	15
At 7 days	47	55
At 28 days Flexural strength (N/mm <sup>2</sup> )	49	70
At 24 hours	: Flowable	Fluid
At 3 days	10	8
At 28 days	11	9
Modulus of Elasticity	14	13
Coefficient of thermal expansion	: >3300 MPa	
	: 10x10 <sup>-6</sup> mm/mm/°C	

### Application Guide Surface Preparation:

All surfaces must be sound, clean and free from dust, grease, oils, curing compounds, mould-release agents or other adhesion-inhibiting materials. Remove all surface laitance and maintain a surface profile between CSP 1 & CSP 5 as described by the International Concrete Repair Institute (ICRI).

Thoroughly saturate all mineral substrate and remove standing/surface water before application of INDUGROUT-GP.

Steel reinforcement must be grit blasted to SA 2&1/2 (white clean metal) and immediately primed with INDUBOND-VK4032-ACI or INDUCRET-BIS-0/2 before new rust/scale is formed. Please refer to the relevant technical data sheets.

### Shuttering:

Always use watertight and smooth surfaced shuttering. Use rubber strips or appropriate sealant between the formwork and the host concrete. Maintain a maximum unrestrained (exposed) gap between the formwork and base plate edge of:

25 mm on inspection sides.

70 mm on pouring side.

### Mixing:

Place the exact amount of water in a clean vessel and gradually add the contents of the bag while mixing with an electric drill (maximum 450 rpm) attached with the appropriate mixing paddle. Continue mixing until a homogenous, lump-free consistency is achieved. An appropriate grout mixer is recommended for large volume grout pours. DO NOT mix more than what you can consume within 45 minutes at +25°C. DO NOT RE-TEMPER grout to restore workability must not be used.

### Placement:

Continuously pour- from the pouring side- the mixed materials onto the prepared substrate. Avoiding air pocket entrapment & allow air to escape. If base plate grouting is carrying out, ensure adequate head pressure is maintained throughout the pouring process. Voids should be removed by rodding or strapping.

### Curing:

INDUGROUT-GP is a cementitious grout. ACI recommendations should be followed during mixing, placement and curing. After placement, the grout must be properly cured for at least 3 days. REMICURE S, curing compounds from the AQUAFIN range can be used. Protect freshly placed grout from direct sunlight and/ or extreme temperatures.

### Cleaning:

Clean all tools & equipment with water immediately after finishing grouting works. Cured/hardened grout can only be removed mechanically.



### **Estimating & Supply Packaging:**

INDUGROUT-GP is available in 25 kg bags.

### **Yield:**

12.5 liters/bag in the flowable state.

13.0 liters/bag in the fluid state.

### **Storage & Shelf-Life:**

12 months when stored in original, unopened bags and elevated from the floor in a covered & well-ventilated storage area away from extreme temperatures, and any source of moisture.

### **Health & Safety:**

- INDUGROUT-GP is non-toxic & non-hazardous during handling, storage & use.
- Do not dispose directly into water or onto soil. Expired or out of pot-life material should be disposed of in accordance with local environmental regulations.
- Splashes on skin can be washed with soap and water.
- For more details about any safety requirement, please refer to valid MSDS.

