

# PIOFLOW GP

General purpose cement-based, non-metallic, free-flowing non-shrink grout

## DESCRIPTION

**PIOFLOW GP** is non-oxidized cement-based grout which requires only the addition of water to produce non-shrink & flowable mortar. **PIOFLOW GP** contains selected Portland cements, special graded aggregates, fillers, and chemical additives.

## USAGES

- Filling voids and holes between new and old concrete
- Grouting under steel structures, pre-cast supports and other similar works
- Anchor different kind of fixings such as bolts, crane rails, stanchion bases, masts, and fence posts
- Bridges bearing
- Restumping and void filling application
- Closing or filling around pipes in water tanks and swimming pools and other similar applications

## STANDARDS

**PIOFLOW GP** is formulated to comply with:

- BS 6920 Part 2.6: 2000
- BS 1881: Part 122
- BS 6319: PART 3: 1983
- BS 6319: PART 7: 1985
- ASTM C 1202
- BS EN 12190
- ASTM C348
- ASTM C 1107

## TECHNICAL DATA

### PIOFLOW GP

Compressive Strength  
(ASTM C942)

Day 1 (N/mm<sup>2</sup>)

### Typical values

20

Day 7 (N/mm<sup>2</sup>)

40

Day 28 (N/mm<sup>2</sup>)

55 – 60

Flexural Strength  
(BS 6319)@day 28 (N/mm<sup>2</sup>)

7

Grain size

up to 4.75mm

Initial setting time

2 – 3 hours

Final setting time

3 – 4 hours

pH

12

VOC & formaldehyde content  
ISO/FDIS 11890-2/GC-MS

3.8 g/l

## ADVANTAGES

- Requires only addition of water on site at application time
- Non-metallic, and chloride free
- Adjustable consistency
- High mechanical and high heat resistance properties
- Low permeability ensuring durability
- Non-toxic and does not contain any harmful ingredient
- Resistant to sea water and sulfate
- High bond strength to concrete and steel
- Can be applied by pouring or pumping
- Formulated for the Middle East climate

## USAGE INSTRUCTIONS

### 1. Surface preparation

All surfaces shall be sound, clean, and free from dust, oil & grease or any contaminants that may affect the bond between the product and substrate. Absorbent surfaces shall be saturated thoroughly.

### 2. Mixing

The exact amount of water shall be put in a clean vessel (or mixer) and gradually add the powder while mixing, continue mixing till homogenous consistency free from lumps is achieved. It is recommended to use an electric drill mixer of maximum 400 – 500 rpm (medium/heavy duty) with an appropriate mixing paddle, mixing manually can affect the performance of grout. It is not recommended to mix more than that you can place within 60 minutes, do not retemper to restore workability.

## PIOFLOW GP

Water (Liters)/25 Kg bag

Yield (liters)

## Flowable

3.5 – 4.0

13.0

## STORAGE & SHELF LIFE

**PIOFLOW GP** shall be stored in normal conditions away from extreme temperatures, and any source of moisture. Shelf – life is 12-months.

### 3. Application

#### For Jacketing/Repair

**PIOFLOW GP** can be used for thickness up to 10 cm. existent surface needs to be roughened and cleaned ensuring application on damped surfaces.

#### For Shoring/Soil Nailing application

**PIOFLOW GP** can be used for grouting the inclined holes in shoring application, hole diameter must not exceed 20 cm, depth of hole will be determined by structural engineer.

### 4. Curing

**PIOFLOW GP** is a cement-based material, that should be cured properly by spraying water for 3 days.

Using **ENECURE WB** curing compound is recommended.

## PACKAGING

**PIOFLOW GP** is supplied in 25 & 50 kg bags.

## HEALTH & SAFETY

**PIOFLOW GP** Is non-toxic and non-hazardous, if material comes in contact with skin, cleaning with water and soap is recommended.

For Ecology: Do not dispose directly to water or soil, re-use it if possible or mix with water and wait until it hardens then bury it in landfill in accordance with national regulation.

### TECHNICAL SERVICE

The technical service department of Arkaz is available to assist in the correct and best use of our products, these resources and advice are at your disposal entirely without obligation.

Please contact:  
concretedoctor@arkaz.com

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