

# 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 and flowable mortar. **PIOFLOW GP\*** contains selected Portland cements, special graded aggregates, fillers, chemical additives, shrinkage compensating materials and modifiers that permit it to be applied in an ordinary gaps of thickness range of 20-100 mm by pouring.

## USAGES

- Grouting under machines and equipment
- 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 and other similar applications

## TECHNICAL DATA

### PIOFLOW GP\*

### Typical values

	Fluid	Flowable
<b>Compressive Strength</b> (ASTM C942)		
Day 3 (N/mm <sup>2</sup> )	30	40
Day 7 (N/mm <sup>2</sup> )	34	43
Day 28 (N/mm <sup>2</sup> )	50	60
<b>Flexural Strength</b> (BS 6319)		
Day 28 (N/mm <sup>2</sup> )	13	14
<b>Setting Time (I-F)</b> (ASTM C953)	4 – 6 hours	
<b>Expansion</b> (ASTMC940-10a)	0.05%	
<b>Specific Gravity @20°C</b> (wet)	2.1 – 2.2	
<b>Pot Life @25°C</b>	30 min	
<b>Fresh Wet Density</b>	2230±50	

## STANDARDS

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

ASTM C-1107: "Packaged Dry, Hydraulic – Cement Grout (Non-shrink)" Grade B as well as CRD C- 621.

## ADVANTAGES

- Requires only addition of water on site at application time
- Non-metallic, shrinkage compensated, fiber reinforced contains micro silica to enhance strength and durability
- Adjustable consistency
- High mechanical and high heat resistance properties
- Low permeability ensuring durability
- Non-toxic and does not contain any harmful ingredient
- Chloride-free and nitrate-free
- 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*	Fluid	Flowable
Water (Liters)/25 Kg bag	4.0	3.75
Yield (liters)	13.2	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. Placement

Pour the mixed materials onto the prepared substrate continuously from one side avoiding air pocket entrapment (allow the air to escape). If base plate grouting being carried out, voids should be eliminated by eliminating rodding, strapping.

### 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:  
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