

Porofill

20

Foaming agent



PRODUCT DESCRIPTION

Porofill 20 is a very effective foaming and consistency-imparting agent for mortars and concretes based on synthetic tensides.

AREA OF USE

Porofill 20 is specially designed for making lightweight concrete/mortar, with a density of 1600 - 1800 kg/m³.

PROPERTIES

Porofill 20 is used to produce cement based gravel backfills with specific densities between 1600 and 1800 kg pr m³ and with cement contents of only 60 to 80 kg pr m³. The workability of the mortar/concrete is vastly improved. As a consequence of its low cement content, heat development is very low – thus backfills of considerable sizes can be executed.

Porofill 20 stabilized gravel backfills are different from traditional concretes with lightweight aggregates at even lower densities.

HOW TO USE

Normally two types of light concrete with **Porofill 20** can be manufactured. One is for a backfill that easily can be removed at a later stage, and is placed by means of a chute. This is a non-pumpable mass with compressive strengths of 0.5 to 1.5 N/mm². To make this kind of concrete pumpable, it is necessary to increase the cement content, and by this the compressive strength is also increased to > 5 N/mm², making it somewhat harder to remove.

Testing the water demand:

The water demand for a certain workability varies a lot dependent on the gravel's quality. The actual water demand has to be found specifically at each ready mix plant. Whenever the type of gravel is changed, a new test must be performed.

1. Add all cement and gravel, water approx. 180 - 240 litres/m³ (incl. moisture content in aggregates) and then 1 litre/m³ of **Porofill 20**. Mixing time, though dependent of the efficiency of the mixer, should be no less than 90 sec after all ingredients are added.
2. Measure the slump by slump cone. If this fails to have a minimum of 220 mm on work site, more water should be added to the first mix.

Pretesting should always be done on actual available materials in order to find the final composition. Mixing equipment must be washed before other concrete is produced in the mixer to eliminate undesirable air in any new concrete. Adding **Porofill 20** to a truck mixer is not recommended because of unreliable mixing results.

COMBINATION WITH OTHER ADDITIVES

Porofill 20 should not be combined with other additives without proper testing.

PACKAGING

Porofill 20 is available in 25 liter cans, 200 liter drums and in 1000 liter IBC tanks. Stored in closed containers, protected from frost and direct sunlight, the shelf life is 1 year.

DOSAGE

Normally, 1 kg = 1 liter **Porofill 20** is added per m³ ready-to-use mortar.

SAFETY INSTRUCTIONS FOR PREPARATION AND INSTALLATION

Instructions for the safe use of our products can be found on the latest version of the SDS available from our website www.mapei.no

PRODUCT FOR PROFESSIONAL USE.

WARNING

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above - information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application: for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application: in every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the technical data sheet, available from our web site www.mapei.no

LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in effect at the time of the MAPEI product installation. For the most up-to-date TDS and warranty information, please visit our website at www.mapei.com.

ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED IN OR DERIVED FROM THIS TDS SHALL VOID ALL RELATED MAPEI WARRANTIES

All relevant references for the product are available upon request and from www.mapei.no

TECHNICAL DATA (typical values)

TECHNICAL SPECIFICATIONS

Mix design (1m ³)	Sand 0 - 8 mm	Cement	Water
Casting with a chute:	Approx. 1400 kg	Approx. 60 - 80 kg	Approx. 180 - 240 kg
For pumping:	Approx. 1360 kg	>150 kg	Approx. 200 - 250 kg

PRODUCT IDENTITY

Appearance:	liquid
Colour:	transparent (can turn hazy at lower temperatures)
Solubility:	miscible with water
Solids content, %:	4 ± 0.5
Density, g/cm ³ :	1.00 ± 0.02
pH:	7 ± 1
Chloride content, (%):	< 0.05
Alkali content (Na ₂ O-equivalents) %:	< 1.5



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