

**PRODUCT**

## #108 MORTAR POURABLE

### Pourable, Non-Shrink, Cementitious Grout

#108 MORTAR POURABLE is a ready-to-use product in powder form: mixed with water, it provides a pourable, non-shrink, high strength grout, with high bond to steel and concrete. #108 MORTAR POURABLE contains no metallic aggregate and is chloride free. #108 MORTAR POURABLE is reinforced with special synthetic fibres to improve mechanical characteristics.

**USES**

- Maintenance works in marine areas and harbours;
- Maintenance works in industries;
- Concrete repair;
- Void filling, anchoring steel structures, machine base plates.

**TECHNICAL DATA**

Classification (UNI 8681 / UNI 8682)	One-pack, physical drying, mortar
Granulometry (EN 13300 / EN 1062)	3mm
Chloride Content (EN 1015-17)	≤ 0.05%
Bond strength (EN 1542)	≥ 2.0 MPa
Determination of shrinkage and expansion (EN 12617-4)	2 MPa
Resistance to carbonation (EN 13295)	Pass
Elastic modulus (EN 13412)	20GPa
Thermal Compatibility Part 1 (EN 13687-1)	≥ 1.5 MPa
Capillary absorption (EN 13057)	≤ 0.5 Kg/(m <sup>2</sup> ·h <sup>0.5</sup> )
Apparent bulk volume	1450 ± 50 g/l
Bulk volume in paste	2000 ± 50 g/l
Type of binder	Cement-based (UNI 8681: TA)
Maximum application thickness	minimum 1 cm maximum 5 cm
Drying time	Under normal conditions, it can be covered after 12-24 hours; however, drying time depends on the absorption of the substrate and environmental conditions
Reaction to fire (EN 13501-1)	Class A1
Compressive strength (EN 12190)	Class R4
VOC	Not covered by Directive 2004/42/CE



## SPECIFICATIONS

1. Pot life of the mixture at 23°C ~ 1 hour

2. Water requirement to produce #108 MORTAR POURABLE

Water for 100 Kg. (4 bags) of #108 MORTAR POURABLE

min. max.

14.5 lt. 15.5 lt.

3. About 2.000 Kg. of #108 MORTAR POURABLE are required for 1 cubic meter of Mortar

4. Mechanical performances

Compressive strength	at 1 day	>17	MPa
" "	at 3 days	>40	Mpa
" "	at 28 days	>60	MPa
Flexural strength	at 1 day	>4	MPa
" "	at 3 days	>6	Mpa
" "	at 28 days	>8	MPa

5. Aggregates size: max 3 mm

6. Colour: cement grey

7. Packing

#108 MORTAR POURABLE is packed in 25 Kg. moisture-resistant bags, easy to store and handle thanks to their limited weight.

8. Storage Life: 18 months, if properly stored in the original special bags.

## PREPARATION OF SURFACE

Clean surfaces from grease, oil, old paint residues, lime, dirt or dust.

Remove loose concrete or mortar and laitance, by using scarifiers or chisels to provide rough and sound surfaces.

Concrete surfaces have to be made rough with scarification ridges 5-15 mm. deep, in order to provide the needed restraint to #108 MORTAR POURABLE. This is very important because #108 MORTAR POURABLE needs a rough surface to bind to. For large volume or large area casting, scarification ridges to be not less than 15-20 mm. deep.

Clean reinforcements from rust and add new reinforcing bars if old reinforcement is no longer sufficient.

Reinforcements to be protected, against corrosion, with L.A.2S (Epoxy Coating) or with #108 GRIP (Cement based Slurry).

## WATER SATURATION

Saturate concrete with water and remove any water in excess with air hose or rags before applying #108 MORTAR POURABLE.



## PREPARATION OF THE MORTAR

For a correct mixing of #108 MORTAR POURABLE, the following procedure is advisable:

- Open the bags of #108 MORTAR POURABLE required for the job a short time before mixing is started, pour the minimum amount of mixing water indicated into the mixer. Start the mixer and add #108 MORTAR POURABLE quickly and continuously.
- Use only clean potable water.
- Mix the blend 4 to 5 minutes after all #108 MORTAR POURABLE has been added, until the mortar is well mixed and without lumps.
- Add water, if necessary (within the quantities indicated), until the required consistency is achieved and mix again for 2 to 3 minutes. The water content can slightly vary from those indicated, depending on ambient temperature and relative humidity. In hot and dry climates, slightly higher quantity of water may be necessary, the contrary in cold and humid climates.
- To fill voids with thickness exceeding 5-6 cm, #108 MORTAR POURABLE can be added up to 12% by weight with 3-12 mm in progressive granulometry clean, hard aggregates.  
For larger thickness the quantity of aggregates can be up to 20% by weight.  
With the addition of aggregates decrease the amount of water.

Hand mixing of #108 MORTAR POURABLE is not recommended, in order to avoid the use of excessive quantities of water. For small mixes, a drill with helical mixer can be used.

## APPLICATION

For vertical surface pour #108 MORTAR POURABLE into sealed Formworks

## THE INFLUENCE OF TEMPERATURE

#108 MORTAR POURABLE can be used when ambient temperature during pouring operations is between 5° and 40°C.

However, if ambient temperature is low (5° to 10°C) strength develops slowly. When high early strength is required, the following precautions are recommended:

- a) store the bags of #108 MORTAR POURABLE in sheltered ambient;
- b) use hot mixing water (30° to 50°C);
- c) start pouring operation in the morning;
- d) protect the poured #108 MORTAR POURABLE against cold weather with watertight coverings. Do not pour if temperature is approaching 0°C.

If ambient temperature is high (> 30°C), loss of workability is the only problem. If such loss is too high for the intended use, the following measures are recommended:

- a) store the bags of #108 MORTAR POURABLE in a cool place;
- b) use cold mixing water;
- c) prepare the mortar during the coolest period of the day.



## CURING

All surfaces covered with #108 MORTAR POURABLE exposed to air should be damp cured using wet canvas sheets (jute) soon after completion operation and for subsequent 4-5 days to ensure full cement hydration and to minimise cracking, especially in hot climate.

All information and direction contained in this technical data sheet are given in good faith and are based on the best known practical test.

SINIT when having no control over transport, storage, handling, use and application of its product, will disclaim any responsibilities for any unsatisfactory results obtained.

All tests have been carried out at 23 °C

Revised: February 2023

These data supersede all previously published data.



SINIT INTERMAR S.r.l. – V. Chiarugi, 76 - ROVIGO (ITALY)  
Tel. ++39. 0425 361961 – Fax ++39. 0425 410115  
E-MAIL [info@sinitworks.com](mailto:info@sinitworks.com) WEBSITE: [www.sinitworks.com](http://www.sinitworks.com)



SINIT EPOXY COMPOUNDS AND NEW TECHNOLOGIES IN THE CIVIL, INDUSTRIAL AND UNDERWATER ENGINEERING

