

## MIXTURE OF QUARTZ AGGREGATES FOR MORTARS, EPOXY AND POLYURETHANE MATERIALS

### DESCRIPTION

QUARTZ POWDER, QUARTZ SAND INDUSTRIAL and QUARTZ SAND MIX are special formula of quartz aggregates for mortars, epoxy and polyurethane materials, aiming at the increase of hardness, traction or other characteristics, such as improving of walkability, slid ability, colour, etc. The high content of aggregates in quartz sand ( $\text{SiO}_2 > 98\%$ ), is ideal for producing various types of mortars and achieve high affinity between their components.

### RECOMMENDED FOR

- ▶ Production areas
- ▶ Storage areas
- ▶ Sports and recreation spaces
- ▶ Tiles Adhesives
- ▶ Epoxy floors
- ▶ Concrete or mortars

### ADVANTAGES

- ▶ High purity of quartz aggregates ( $\text{SiO}_2 > 98\%$ ).
- ▶ Wide range of application, due to gradation aggregates.
- ▶ Easy application. Ready to use.
- ▶ Absence of respirable silica.
- ▶ High melting point. No-flash point.
- ▶ Zero VOC – QUARTZ SAND contain zero volatile organic content and are safe for use, both outdoors and in confined indoor spaces.

#### A. QUARTZ POWDER

##### GENERALLY

QUARTZ POWDER consists of micro gradation quartz aggregates aiming the use in epoxy floor, in combination with epoxy primer for repairs. It provides high durability and adhesion, while increasing the traction.

##### TECHNICAL CHARACTERISTICS

Type	Quartz Powder
Colour	Light Grey
pH	9
Specific Weight	2,35 kg/Lt

All data are average values obtained under laboratory conditions. Impractical use, temperature, humidity and absorption of the substrate may influence the above given values.

##### DIRECTIONS FOR USE

**Application:** Apply QUARTZ POWDER, either by mixing or spreading. In case of QUARTZ POWDER apply the final layer of PENEPOX™ PRIMER, spreading QUARTZ POWDER and allow the material to harden. Apply the first layer of PENEPOX™ CS after 12-18h (but not later than 24h).

**Coverage:** Indicatively, as spreading material, the coverage is between 0,5 – 1,0 Kg/m<sup>2</sup>

**NOTE:** QUARTZ POWDER contains respirable cristobalite in percentage 1-10%. Sustained breathing of crystalline silicon powder can cause silicosis. Use with care to avoid dust generation.

#### B. QUARTZ SAND MIX

##### GENERALLY

QUARTZ SAND MIX consists of special formula of quartz aggregates, with aiming the spreading or mixing in mortars and cement. The use of QUARTZ increases the traction and strength of the mixture, while it can be combined with mortars to fill greater thickness (above 5 cm).

MIXTURE OF QUARTZ AGGREGATES FOR MORTARS, EPOXY AND POLYURETHANE

TECHNICAL CHARACTERISTICS

QUARTZ SAND MIX	0,06 – 0,180 MM	0,10 – 0,45 MM	0,1 – 0,6 MM	0,4 – 0,8 MM	1,5 – 8,0 MM	3,0 – 6,0 MM
Type	Quartz Sand	Quartz Sand	Quartz Sand	Quartz Sand	Quartz Sand	Quartz Sand
Colour	Whitishness	Whitishness	Whitishness	Whitishness, Beige - Brown	Light Grey	Light Grey
pH	5 - 8	5 - 8	5 - 8	5 - 8	5 - 8	5 - 8
Specific weight	2 – 3 kg/Lt	2 – 3 kg/Lt	2 – 3 kg/Lt	2 – 3 kg/Lt	2 – 3 kg/Lt	2 – 3 kg/Lt

All data are average values obtained under laboratory conditions. Impractical use, temperature, humidity and absorption of the substrate may influence the above given values.

DIRECTIONS FOR USE

**Application:** QUARTZ SAND MIX can be applied either by mixing mortars or cement, or by spreading in the final layer of epoxy primer or polyurethane based materials.

**QUARTZ SAND MIX 0,06 – 0,180 MM:** Special type quartz mixture for mixing with molded epoxy flooring (PENEPOX™ CS).

**Coverage:** For mixing with molded epoxy flooring, the mixing ratio is 1:1 (by weight).

**QUARTZ SAND MIX 0,10 – 0,45 MM:** Special type quartz mixture for mixing with molded epoxy flooring.

**Coverage:** For mixing with molded epoxy flooring, the mixing ratio is 1:1 (by weight), while as spreading material the range is 1,0 – 3,0 Kg/m<sup>2</sup>.

**QUARTZ SAND MIX 0,1 – 0,6 MM:** Special type quartz mixture for mixing with molded epoxy flooring (PENEPOX™ CS). Also, it can be used as spreading material or for the mortars production.

**Coverage:** For mixing with molded epoxy flooring, the mixing ratio is 1:1 (by weight), while as spreading material the range is 1,0 – 3,0 Kg/m<sup>2</sup>.

**QUARTZ SAND MIX 0,4 – 0,8 MM:** Special type quartz mixture for spreading or for the mortars production.

**Coverage:** As spreading materials the coverage is 1,0 – 3,0 Kg/m<sup>2</sup>.

**QUARTZ SAND MIX 1,5 – 8,0 MM:** Special type quartz mixture for mixing with mortars (PENETRON® GROUT, etc).

**Coverage:** The coverage varies, according to the mortars specifications. Indicatively, for QUARTZ SAND mixing in PENETRON® GROUT, added in ratio 50% by weight of QUARTZ SAND, in order to fill greater thickness (typically above 5 cm).

**QUARTZ SAND MIX 3,0 – 6,0 MM:** Special type quartz mixture for mixing with mortars (PENETRON® GROUT, etc).

**Coverage:** The coverage varies, according to the mortars specifications. Indicatively, for QUARTZ SAND mixing in PENETRON® GROUT, added in ratio 50% by weight of QUARTZ SAND, in order to fill greater thickness (typically above 5 cm).

**NOTE:** QUARTZ SAND MIX contain less than 1% respirable quartz, therefore are not classified as harmful to health.

C. QUARTZ SAND INDUSTRIAL

GENERALLY

QUARTZ SAND INDUSTRIAL consists of special formula of quartz aggregates for spreading in industrial floors.

TECHNICAL CHARACTERISTICS

Type	Quartz Sand
Colour	Whitishness
pH	5-8
Specific Weight	2 - 3 kg/Lt

All data are average values obtained under laboratory conditions. Impractical use, temperature, humidity and absorption of the substrate may influence the above given values.

DIRECTIONS FOR USE

**Application:** Apply QUARTZ SAND INDUSTRIAL by spreading in industrial floors. Firstly, mix with cement in ratio 1:1 (by weight) and in continue spread the product in the surface of concrete.

**Coverage:** As spreading material, in ratio 1:1 (by weight) the coverage is 2,0 – 4,0 Kg/m<sup>2</sup>.

**NOTE:** QUARTZ SAND INDUSTRIAL contains less than 1% respirable quartz and therefore is not classified as harmful to health.

SPECIAL CONSIDERATIONS

DO NOT use this product, if bag is damaged or opened. This product is ready to use.

Contact PENETRON HELLAS S.A. for further information, regarding your project.

## MIXTURE OF QUARTZ AGGREGATES FOR MORTARS, EPOXY AND POLYURETHANE

## PACKAGING

Product	Packaging
QUARTZ POWDER	25 Kg Bags
QUARTZ SAND INDUSTRIAL	25 Kg Bags
QUARTZ SAND MIX 0,06 – 0,180 MM	25 Kg Bags
QUARTZ SAND MIX 0,10 – 0,45 MM	25 Kg Bags
QUARTZ SAND MIX 0,1 – 0,6 MM	25 Kg Bags
QUARTZ SAND MIX 0,4 – 0,8 MM	25 Kg Bags
QUARTZ SAND MIX 1,5 - 8,0 MM	25 Kg Bags
QUARTZ SAND MIX 3.0 - 6.0 MM	25 Kg Bags

## SAFE HANDLING INFORMATION

May cause eyes and skin irritation. Avoid skin and eye contact. If contact is made, flush areas with lots of water and seek medical advice. Protective gloves, mask and goggles should be worn. For further information please refer to Safety Data Sheet. PENETRON HELLAS S.A. has recently updated Safety Data Sheet on the safe use of PENETRON® products. Each Safety Data Sheet contains health and safety information for the protection of your employees and your customers. KEEP OUT OF REACH OF CHILDREN.

## WARRANTY - DISCLAIMER

PENETRON HELLAS S.A. warrants that its products are manufactured under certified ISO Standard procedures, are of excellent quality and shall be free from material defects and contain all components in their proper proportion. Should any of the products be proven defective, the liability to PENETRON HELLAS S.A. shall be limited to replacement of the material proven to be defective, since the standard application procedures have been met and the suitability of the product for the particular application have been proven. PENETRON HELLAS S.A. makes no warranty as to merchantability of fitness for a particular purpose. User, after contacting the distributor of the product, shall determine the suitability of the product for his intended use and assume all risks and liability in connection therewith. While every care has been taken, the information provided in this product's data sheet make no part of any contract. All recommendations, technical data and test data contained in this product's data sheet are based upon the results of control laboratory tests or in actual field tests. However, PENETRON HELLAS S.A. makes no warranty of any kind, concerning this data. In any case, this data are given in good faith based in the PENETRON HELLAS S.A. experience, till the publication of this sheet. Due to variance in storage, handling and applications of the materials, PENETRON HELLAS S.A. accepts no liability for the results obtained. It is suggested that potential users try small applications to determine the suitability of each individual product for their specific requirements. The users should always refer to the most recent edition of the product's data sheet. PENETRON HELLAS S.A. may particularly differentiate its versions of the product's data sheet compared with those of PENETRON INTERNATIONAL LTD or respective PENETRON companies worldwide. These changes are due to text formatting, different application weathering and procedures or different product names and aim at the optimal consumer information.

## STORAGE / SHELF LIFE

When stored in a dry enclosed area off the ground without solar radiation in unopened, shelf life is unlimited.