

# ROCKBOND SCP LTD

# FORMULATORS, MANUFACTURERS AND CONSULTANTS OF SPECIAL CONCRETE PRODUCTS

Newton's Farm Estate, Wissington, Nayland, Suffolk.CO6 4LX, England Telephone: 01206 265116 Facsimile: 01206 265117

Email: info@rockbond.co.uk Website: www.rockbond.co.uk

#### ROCKBOND PERLITE SANDS AND AGGREGATES

#### **DESCRIPTION:**

ROCKBOND PERLITE SAND (RB PS) is a naturally occurring form of siliceous volcanic rock, consisting of approximately 90% aluminium silicate. The rock is dried, crushed and graded, and then heated in kilns to a temperature of 1250°C. Heat treatment causes the perlite to expand and form an infinite number of discrete air bubbles within the sand particles. It is the air within the material that gives the sand its lightweight and unique physical properties. ROCKBOND PERLITE SAND AND AGGREGATES are packaged in 10kg moisture proof, durable bags and have an indefinite shelf life.

#### **SPECIAL PROPERTIES:**

- \* Pure, white, light with a very low bulk density.
- \* Can be supplied in various gradings, from a fine sand to a coarse aggregate.
- \* Sterile, inorganic, inert, pH neutral and resistant to chemicals and attack by strong mineral acids.
- \* Biologically stable, permanent, will not mould, rot, decay or decompose.
- \* Fire resistant, non combustible, and will not give off noxious or toxic gases.
- \* Excellent insulator, and a poor conductor of heat and sound.
- \* Highly adsorbent material for liquid spillages, hazard solutions, chemicals, oil and diesel.
- \* Does not contain asbestos.
- \* High yielding, economical, non flammable, non toxic, odour free, user friendly and safe to use.

# **USES**:

- + As a loose infill for thermal insulation in cavities, storage tanks, attics, chimneys and kilns.
- + For gunite, shotcrete and spray coatings placed with minimal slump, sinkage and settlement.
- + For the production of lightweight linings, plasters, renders, roofs, floors, screeds, mortars, grouts and concrete.
- + In the manufacture of precast construction products such as doors, beams, boards, and blocks that are lightweight, fireproof and provide thermal and acoustic insulation.
- + For sands and aggregates for use in fire resistant, refractory and foundry materials. For fire and high temperature resistance to kilns, ovens, boilers, fireplaces and chimneys.
- + For filtration material used to produce clean water, free from colour, taste and odour.
- + To thermally insulate buildings, floors, roofs, walls, cavities, pipes and ducts.
- + As an adsorbent to soak up aqueous solutions, oil, chemicals and industrial waste.
- + For use in particular applications such as acoustics, cosmetics, filtration, agriculture, horticulture and construction.

## MIXING INSTRUCTIONS:

ROCKBOND PERLITE SANDS AND AGGREGATES are mixed with the appropriate cement, admixtures and water using a ROCKBOND CONCRETE STIRRER (RB CS), an electric power tool (1kW) and a ROCKBOND 25 LITRE MIXING CONTAINER (RB 25LMC). Use a ROCKBOND FORCED ACTION PAN MIXER 120 LITRES (RB FAPM120) to mix larger amounts of the material.

Measure and pour a quantity of water into the container or mixer.

Add cement and sand to produce a mortar, add an aggregate to produce a concrete.

After all the ingredients have been added, mix for 30 seconds.

The mortar or concrete is ready for use.

1 of 2

#### ROCKBOND PERLITE SANDS AND AGGREGATES CONTINUED...

# **TECHNICAL DATA:**

# SAND AND AGGREGATE GRADES AVAILABLE:

-2.000mm +0.150mm -2.000mm +1.000mm -3.000mm +0.150mm -3.000mm +1.000 -5.000mm +3.000mm -6.000mm +3.000mm

## **CHEMICAL COMPOSITION:**

SiO <sub>2</sub>	74%
Al <sub>2</sub> O <sub>3</sub>	15%
K <sub>2</sub> O	5%
Na <sub>2</sub> O	3%
Fe <sub>2</sub> O <sub>3</sub>	2%
Others	1%

#### **PHYSICAL PROPERTIES:**

LOOSE BULK DENSITY: 50 to 100kg/m³ SOFTENING POINT: 900 to 1100 °C FUSION POINT: 1280 to 1350 °C

SPECIFIC HEAT: 0.20 pH: 6.5 to 7.5

#### **HEALTH AND SAFETY:**

ROCKBOND PERLITE SANDS AND AGGREGATES are non toxic and safe to use. However, because the perlite sand contains a fine dust, wear protective clothing, goggles and a dust mask while handling the material. Consult the relevant MSDS for further details. Store in a cool, dry, dark place.

# **FURTHER INFORMATION:**

Should you require further information on this product, or details of other ROCKBOND SPECIAL CONCRETE PRODUCTS, then please do contact our Technical Department:

Gilbert Cox BSc, Telephone: 01206 265116, Technical Director, Facsimile: 01206 265117

Rockbond SCP Ltd.,

Suffolk, CO6 4LX, England.

#### **IMPORTANT NOTE:**

ROCKBOND SCP LTD provides the above information in good faith and without warranty. The data represents typical values which can be updated at any time, and this information supersedes previous issues. No liability can be accepted for any damage or loss arising from the use of ROCKBOND SCP LTD literature or its products, because the company has no continuous control on how the products are mixed, placed or cured.

# OCTOBER 2021