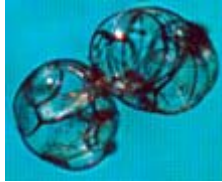




SAMSON KAMNIK d.o.o.
KOVINARSKA C.28, SI-1240 KAMNIK, SLOVENIJA
Tel: (01) 83 17 255, (01) 83 19 260 Fax: (01) 83 17 179
E-mail : samson@samson-kamnik.si

MIKROSIL



Mikrosil microspheres is a lightweight filler, inert, inorganic, non toxic, hollow glass particles of various shapes, spherical and multicellular. They are obtained after processing a volcanic rock with a chemical structure very similar to a granite (quartz, feldspath, mica).

The grades are different by their particle size, their density and whether they are coated or not (depending on the finished product made by the user : powder or ready mix).

Packaging : the products are sold in bags, big bags or bulk.

MIKROSIL is offered in three main grades:

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES :

	100 EC & E	200 EC & E	400 EC & E
Dry bulk density	110-120 kg/m ³	140-150 kg/m ³	210-230 kg/m ³
Effective particle density	0.18 g/cm ³	0.26 g/cm ³	0.38 g/cm ³

EC : coated

E : not coated

Oil absorption (ASTM D -1485)	33/40 g/100 cc
Alcalinity (ASTM D - 3100)	0.030
Moisture	0 (at our factory)
Solubility	insoluble in water and solvents
Surface pH	7.0
Colour	White
Thermal conductivity	0,36 W/m ² °K
Melting point	1260 ° C
Fire reaction	MO incombustible

CHEMICAL PROPERTIES

SiO ₂	74.28
Al ₂ O ₃	12.8
K ₂ O	4.6
Na ₂ O	3.5
CaO	0.9
Fe ₂ O ₃	0.9
MgO	0.2
TiO ₂	0.1

TYPICAL APPLICATIONS

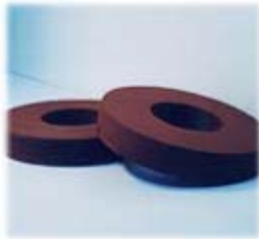
		% Mikrosil	grade	
Jointing Compounds & Plasters	Reduction of shrinkage less cracking (thicker coats) less sagging Easy to apply Reduction in drying time (lower need for water) Weight reduction Easy sanding Whiteness - Economical	6 to 10 %	200	 
Crack-Fillers	Reduction of shrinkage Easy to apply less cracking (thicker coats) less sagging Weight reduction Easy sanding Reduction in drying time (lower need for water) Whiteness - Economical	8 to 10 %	200	
Tiles Adhesives	Reduction of shrinkage Easy to apply less cracking (thicker coats) less sagging Weight reduction Reduction in drying time (lower need for water) Whiteness	8 to 10 %	100 200	
Cement-based Jointing Compounds sealing	Reduction of shrinkage Easy to apply less cracking (thicker coats) less sagging Weight reduction Reduction in drying time	3 to 6 %	200	
Culture marble (granules + calcium carbonate + resin)	Resistance to thermal shocks and impact Weight reduction Economical	3 to 5 %	100	

Polyurethane and epoxy resins

- Tooling compound, Prototype parts
- Structural / Composite parts
- Modelling boards / paste
- Synthetic wood
- Synthetic marble
- Synthetic medial



Abrasives



- Abrasive Papers
- Grinding Wheels
- Ablative Blades
- Paints
- Pressure Sensitive Adhesives
- Car Underbody Sealants
- Low Pressure Laminations

Thermosetting Putty

- Marine
- Automotive
- Aerospace



Construction Materials

- Polymer Concrete
- Light Weight Concrete
- Building Insulation Panels
- Cultured Marble
- Low Pressure Mouldings
- Fibre Reinforced Plastics
- PVC Plastics
- Acoustic Floorings
- Wood Fillers
- Patching Compounds
- Potting Compound

Sporting Goods

- Bowling Ball Cores
- Golf Ball Cores
- Racquets

Explosives - Dynamites

Electronics

- Micro-encapsulation

Oil Exploration

- Oil Drilling Cement

