

eurocell[®]

the superlight mineral additive technical information

DESCRIPTION:

eurocell[®] is a microcellular, expanded vulcanic mineral. It is a special type of Aluminiumsilicate.

The shape varies to combine different geometries of multicellular spherical bubbles, rods and flakes.

eurocell[®] both keys mechanical and cohesive to the composite. This results in higher packing and better composite strength compared to other bubble-type microspheres.

The **eurocell[®]** standard-types differ by particle size, particle distribution, bulk weight, volume and effective density. Specific surface treatment leads to an optimised key into both inorganic and organic composites.

PROPERTIES:

Very white; low effective density; irregular multicellular shape; free flowing; inert; chemical resistant; neutral odor; resistant to frost; neutral to environmental; noncombustible.

ADVANTAGES:

Reduced density and lower weight of final product; reduced need of binders and resin; improved flow characteristics; higher additive component; improved thermal und sound protection; reduced shrinkage; improves mechanical properties of final products combined with improved chemical resistance; low water absorbtion, noncombustible; improved thermal shock resistance and stability of dimensions; very white.

TYPICAL APPLICATIONS:

Products made of Polyester-, Epoxy-, Phenol- and Polyurethane resin, light weight SMC and -BMC, sealants, putties, GFK, car surface protection, PVC plastisoles, textured colours and plasters, mortars, selv-leveling floor surfaces, thermal insulating coatings and colours, cultured marble and foams, simulated wood, synthetic rubber, anti sound coatings, fire resistant coatings, glues, sandwich-panels.

Basic formulations for the above mentioned applications are available.

MIXING PROCEDURE:

Mixing of **eurocell[®]** in waterbased or resin systems should be done as last componet as hollow type additives generally are sensitive to shear ind impact forces. The use of a low shear mixers and short mixing times minimizes particle breakage.

In waterbased systems (e.g. colours and plasters) add **eurocell[®]** after dispersing pigments and additives at the semifluid phase. Dissolvers with low RPM can be used. Plasters produced with **eurocell[®]** can be easily pumped with Knauf or Putzmeister pumps. For dry mixes systems like the Lödige mixers proved to be good (shut off vortex sheets!). For resin systems (like PUR, Epoxy, Polyester) we recommend low shear, folding type mixers with reduced speed.