



# PERLITE MICROSPHERES



# INTRODUCING PERLITE MICROSPHERES

Introducing Perlite Microspheres; a density-reducing filler for water or resin-based applications. It's very cost-effective.

Millions of particles can be found in a single gram of Temperlite Perlite Microspheres. Perlite Microspheres are made from siliceous rock that can be found at volcanoes. When rapidly heated to above 870°C, the ore pops as the water in the crude rock vaporizes & they expand 4 to 25 times their original volume.

This will create countless partial vacuum air pockets in the heat softened glassy particles which gives the expanded perlite remarkable physical properties, making it lightweight.

The distinctive characteristics of Perlite Microspheres is that it's white & hollow. Our Perlite Microspheres consist of many honeycomb-shaped cells & depending on the grade of the microspheres produced; they may contain practically perfect spheres and numerous other comparable shapes.

## Chemical Composition

- **70-80%**  $\text{SiO}_2$   
(Silicon Dioxide)
- **10-15%**  $\text{Al}_2\text{O}_3$   
(Aluminum Oxide)
- **0-3%**  $\text{SO}_3$   
(Sulphur Oxide)
- **0-5%** other trace inorganic minerals
- **2-6%**  $\text{Na}_2\text{O}$   
(Sodium Oxide)
- **0-3%**  $\text{K}_2\text{O}$   
(Potassium Oxide)

# Common Applications

- Cement additives
- Caulk
- Joint compound
- Marine putty
- Grout
- Cosmetics
- Thermoplastics
- Coatings
- Top coats
- Plastics
- Paints
- Flooring compounds
- Automotive putty
- Composites
- Prime paints
- Thermosets



# Benefits of using Perlite Microspheres



Cost Saving



Low density



Increase impact strength



Smoother surface finish



Greater thermal insulation



Easier machinability



Faster cycle times



Inert state



Fire resistant



Available in various sizes & bulk densities.