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Copper Coated Glass Microspheres
GL-0263
DATA SHEET

Appearance

Solid borosilicate glass microspheres with a metallic copper coating.

Chemical Composition (by weight)

A. Glass

Silica (SiO_2)	70~80%
Boron oxide (B_2O_3)	10~15%
Sodium oxide (Na_2O)	5~10%
Alumium oxide (Al_2O_3)	2~5%

B. Coating

Copper (Cu)	90~99%
Nickel (Ni)	1~10%

Physical Properties

Specific Gravity	2.2~2.3 (g/cm^3)
Bulk Density of Dry Beads	1.2 g per cm^3 (71 lbs/ft^3)
pH in water @ 25°C	7.3
Softening Temperature	830°C
Conductivity $(ohm\text{-}cm)^{-1}$	0~1% of pure copper
Coefficient of Thermal Expansion..	32 x 10^{-7} /º C (30-300º C)
Approximate Coating Thickness….	600-1000 angstroms

Applications

Typical applications of GL0263 beads include: conductive filler for plastic, pigment, and etc…