



Glass Bubbles data sheet

Description: Chemically composed of glass, their hollow form helps reduce matrix density. Their spherical shape prevents stress concentration and, as a consequence, increases cracking resistance of putties. In comparison to microballoons, they are physically harder, more waterproof and somewhat more difficult to sand. They have a fractional survival rate of 80% or more, for continuous use at 250 psi in highly filled resin systems. As a result, glass bubbles are also used as an additive for a number of buoyancy applications, in depths of up to 600 m in seawater. Suggested quantity to add in putties depends upon application.

| Properties | Unit | Value |
|--|-----------|---|
| Isostatic crush strength | psi | 250 |
| True density | g / cc | 0.10 to 0.14 (typical 0.125) |
| Bulk density | g / cc | 60% of true density |
| Chemical resistance | | Similar to soda-lime-borosilicate glass |
| Calculated thermal conductivity at 21 °C | Wxm-1xK-1 | 0.047 |
| Alkalinity | mEq / g | ≤ 0.5 |
| Thermal stability | | Appreciable changes in bubble properties may occur above 600 °C, depending on temperature and duration of exposure. |
| Dielectric constant at 100 MHz | | 1.2 to 1.7 based on theoretical calculations |
| Mean particle size | μ | 65 |
| Hard particles | μ | ≤ 420 |
| Oversize particles (larger than 177 μ) | % | < 5 |
| Volatile content (by weight) | % | 0.5 |

Storage and handling: Store in closed containers in warehouse for at least 1 year.

Note: Technical information furnished is based on laboratory findings and believed to be correct. Since conditions of product use are outside our control, no warranties of any kind are made except that the materials supplied are of standard quality. All risk and liabilities arising from handling, storage and use of products, as well as compliance with applicable legal restrictions, rests with the user.