

Extra Types of Microsphere *Phenolic resin and Graphite*

BRACE microsphere types BRHF, BRGU, BRFM, BRGC and BRACC are heat-hardened resin microspheres made of phenol. The phenol is synthesized by a new polymerization process. The available diameters range from the several microns to several thousand microns. Depending on the grade of crosslinking the types range from BRGU and BRFM to the totally duroplastic BRHF type. BRHF's angle of repose is much smaller than one of former phenol resins.

The BRGC type is an amorphous carbon sphere, whereas the BRACC type an active carbon type sphere is.

Typical Applications

- BRFM, BRGU Type : Molding materials, Fireproof materials, Carbon materials, Tribological materials, Abrasives, Paint, Adhesive, Rubber additive
- BRHF Type : Carbon materials, Active carbon, Tribological materials, Abrasives, Resin reforming materials, Filling materials, Bearing

Features of spherical resin

- Heavy molecular weight (more than 3000: assumption) makes it highly stable for heat
- Disparts well with rubber etc because of its spherical shape
- Does not cause caking and stable to store (BRFM)
- Less odour as it does not need hexamine to harden, and no erosion (BRFM)
- Safer because it contains hardly any free phenol and formalin (BRHF)
- Less gas occurs during the carbonizing process, and can obtain fine carbonized products (BRHF)

Spherical phenol resin has the above mentioned features. However, the structure is condensation of phenol/formalin, so it is used in the conventional phenol resin field, but also can be used for larger products and phenol products. Carbonized product makes the features more prominent.

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Phenolic and Graphite Microspheres

Author: Dr. Thorsten Brandau

Datum: 20. November 2006

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BRACE GmbH

Taunusring 50 * D-63755 Alzenau

Tel: +49 (0) 6023 32316 * Fax: +49 (0) 6023 4973

email: info@brace.de * http://www.brace.de

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