

GENERAL PURPOSE BASALT MICROSPHERES

- opaque black sieve fractions

- Over 20 grades from 75µm – 2.40mm
- High performance sonic sieving process
- 90% within the nominal particle size distribution
- Sieves used calibrated to NPL and NIST standards

General Purpose Beads

Whitehouse Scientific, one of the most widely recognised and respected manufacturers of particle size calibration standards using glass microspheres, has added basalt microspheres to its range

The transparency of standard glass microspheres presents problems for some particle sizing systems and technologies. Being opaque, the new basalt standards provide an alternative and long term solution.

There are over 20 individual narrow distribution grades each with excellent sphericity, ranging in size from 50 microns up to 2 millimetres. The calibration standards are supplied in convenient 100g lots and ideal for use in both lower grade and initial research applications.



September 2007

| Sieve Fraction (µm) | Weight per Jar (g) | Catalogue Number | Price per pack | | |
|---------------------|--------------------|------------------|----------------|----|-----|
| | | | £ | €* | \$* |
| 75 – 90 | 100 | BM0083 | 45 | 70 | 90 |
| 90 – 106 | 100 | BM0098 | 45 | 70 | 90 |
| 106 – 125 | 100 | BM0116 | 35 | 55 | 70 |
| 125 – 150 | 100 | BM0138 | 35 | 55 | 70 |
| 150 – 180 | 100 | BM0165 | 35 | 55 | 70 |
| 180 – 212 | 100 | BM0196 | 35 | 55 | 70 |
| 212 – 250 | 100 | BM0231 | 35 | 55 | 70 |
| 250 – 300 | 100 | BM0275 | 30 | 45 | 60 |
| 300 – 355 | 100 | BM0328 | 30 | 45 | 60 |
| 355 – 425 | 100 | BM0390 | 25 | 40 | 50 |
| 425 – 500 | 100 | BM0463 | 25 | 40 | 50 |
| 500 – 600 | 100 | BM0550 | 25 | 40 | 50 |
| 600 – 710 | 100 | BM0650 | 25 | 40 | 50 |
| 710 – 850 | 100 | BM0780 | 25 | 40 | 50 |
| 800 – 1000 | 100 | BM0925 | 25 | 40 | 50 |
| 1000 – 1200 | 100 | BM1090 | 25 | 40 | 50 |
| 1200 – 1400 | 100 | BM1300 | 25 | 40 | 50 |
| 1400 – 1600 | 100 | BM1500 | 25 | 40 | 50 |
| 1600 – 1800 | 100 | BM1700 | 25 | 40 | 50 |
| 1800 – 2000 | 100 | BM1900 | 25 | 40 | 50 |
| 2000 – 2400 | 100 | BM2200 | 25 | 40 | 50 |

CHEMICAL COMPOSITION:

| | |
|------------------------------------|------|
| SiO ₂ | 43% |
| Al ₂ O ₃ | 14% |
| CaO | 13% |
| Fe ₂ O ₃ | 14% |
| MgO | 8.5% |
| Na ₂ O/K ₂ O | 3.5% |
| Others | 4% |

Data Sheet according to 93/112/EC

PHYSICAL AND CHEMICAL PROPERTIES:

Appearance:

| | |
|----------------|-------|
| Physical state | Solid |
| Colour | Black |
| Odour | None |

Safety relevant data:

| | |
|-----------------------|----------------------------------|
| Softening point | >900°C |
| Lower explosion limit | Not applicable |
| Upper explosion limit | Not applicable |
| Specific gravity | ca. 2.9 g/cm ³ (20°C) |
| Solubility in water | Not applicable |

In the first stage of refinement, broad distribution glass microspheres are very accurately sieved using a variety of sieving processes to produce extremely sharp cuts from over 2mm down to 75 microns. The processes guarantee that a minimum of 90% of the distribution falls within the nominal size range.

The complete particle size distribution of these General Purpose Basalt Microspheres is not traceable to any International standard, only the start and finish points of the distribution. However, should additional classification be required, this can be carried out on request to provide a higher grade certified standard with NIST traceability. Please contact us with your specific requirement and we will endeavour to help you.

* Currency conversions are provided as a guide only and are therefore subject to slight fluctuation