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TECHNICAL DATA SHEET 857

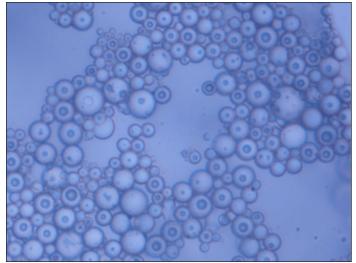
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Glass Beads

Catalog Numbers: 07666, 07668, 15926

DESCRIPTION

Our borosilicate and soda-lime glass beads have been sieved to the noted diameter ranges, and they are provided in powder form.



Cat. #07666: 3-10µm Borosilicate Glass Beads

Borosilicate Glass Soda-Lime Glass (Cat. #07666) (Cat. #07688 & 15926)

| Thermal | & Ele | ectrical | Properties |
|---------|-------|----------|------------|
| O (1 ' | р. | ۰۰ | - |

| Softening Point, °C | 846 | 704 |
|---|---------------------|----------------------|
| Expansion Coefficient, in/in/ °CX10 ⁻⁷ | 28 | 90 |
| Thermal Conductivity, | n/a | 0.0036 |
| cal/(sec)(cm²)(°C/cm) at 500°C | | |
| Dielectric Constant, 22°C, 10 ⁶ Hz | 5.8 | 6.9 |
| Volume Resistivity, 25°C, ohm-cm | $10^{13} - 10^{16}$ | 6.5×10^{12} |

STORAGE

Store at room temperature.

This product is for research use only and is not intended for use in humans or for *in vitro* diagnostic use.

CHARACTERISTICS

| 0117 till t0 1 E1110 1 100 | | | | | |
|---------------------------------------|------------------------------------|-----------------------|--|--|--|
| | Borosilicate Glass Soda-Lime Glass | | | | |
| | (Cat. #07666) | (Cat. #07688 & 15926) | | | |
| Composition (%) | | | | | |
| SiO ₂ | 52.5 | 72.5 | | | |
| Na ₂ O | 0.3 | 13.7 | | | |
| CaŌ | 22.5 | 9.8 | | | |
| Mg0 | 1.2 | 3.3 | | | |
| Al_2O_3 | 14.5 | 0.4 | | | |
| FeO / Fe ₂ O ₃ | 0.2 | 0.2 | | | |
| K_20 | 0.2 | 0.1 | | | |
| $B_2^{-}O_3$ | 8.6 | 0.0 | | | |
| Physical & Mechanical Properties | | | | | |
| Specific Gravity, g/cm ³ | 2.54 | 2.5 | | | |
| Refractive Index, nD | 1.55 | 1.51 | | | |
| Young's Modulus, 10 ⁶ psi | 10.5 | 10.0 | | | |
| Rigidity Modulus, 10 ⁶ psi | n/a | 4.3 | | | |
| Hardness, moh | 6.5 | 6.0 | | | |
| Coefficient of Friction | 1.0 | 0.9-1.0 | | | |

ORDERING INFORMATION

| Cat. # | Description | Size |
|-----------|------------------------|------|
| 07666-1 | Glass Beads (3-10µm) | 1g |
| 07668-1 | Glass Beads (10-30µm) | 1g |
| 15926-100 | Glass Beads (50-100µm) | 100g |

TO ORDER

In The U.S. Call: 1(800) 523-2575 • (215) 343-6484
In The U.S. Fax: 1(800) 343-3291 • (215) 343-0214

In Germany Call: +(49) 06201-845200
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