

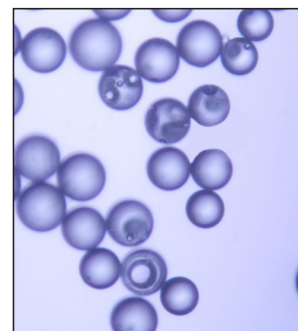
Glass Beads

Catalog Numbers: 15927, 05483, 18901, 18902, 18903, 18905, 18906, 17596, 23584, 23585

DESCRIPTION

Our solid soda-lime glass beads have been sieved to the noted diameter ranges. They are light green in color and are provided in powder form.

Amine- and glycidyl-modified versions of the 30-50 μ m glass beads are available for coupling peptides, dyes and other compounds. Following activation via periodate oxidation, glycidyl-modified beads react with amine-terminated molecules. Glutaraldehyde-mediated and other amine-reactive chemistries are compatible with amine-modified glass beads. Glass beads coated with small biomolecules or dyes should be stored in solvent or in dry form.



Cat. #18901: 30-50 μ m Glass Beads

CHARACTERISTICS

Chemical Composition (by weight)

Chemical Composition (by weight)		Physical Properties	
Silica (SiO₂)	66-75%	Specific Gravity	2.48-2.52 g/cm ₃
Aluminum Oxide (Al₂O₃)	0-5%	Softening Temperature	650°C
Calcium Oxide (CaO)	6-15%	Coefficient of Thermal Expansion	90 x 10 ⁻⁷ /°C (30-300°C)
Magnesium Oxide (MgO)	1-5%	Strength	29 kg/mm ₂ (39,875 psi)
Sodium Oxide (Na₂O)	10-20%	Vicker Hardness	550 kg/mm ₂ (756,250 psi)
Iron Oxide (Fe₂O₃)	<0.8%	Refractive Index	1.51 (nD)

OTHER SPECIFICATIONS

Size Range	≥80% glass spheres in size range, ≥85% true spheres
Color	Light green
Surface	Non-functionalized, amine-modified or glycidyl-modified
Form	Dry powder

RELATED TECHNICAL DATA SHEETS

- TDS 635 - Uniform Silica Microspheres
- TDS 238D - Covalent Coupling of Proteins to Amino and Blue Dyed Polystyrene Microparticles by the "Glutaraldehyde" Method

STORAGE

Store at room temperature.

These products are for research use only and are not intended for use in humans or for *in vitro* diagnostic use.

ORDERING INFORMATION

Cat. #	Description	Sizes
18901	Glass Beads, 30-50 μ m	100g
15927	Glass Beads, 105-150 μ m	100g
05483	Glass Beads, 150-210 μ m	250g
18902	Glass Beads, 210-250 μ m	100g
18903	Glass Beads, 250-300 μ m	100g
18905	Glass Beads, 355-420 μ m	100g
18906	Glass Beads, 420-500 μ m	100g
17596	Glass Beads, 500-850 μ m	250g
23584	Glass Beads, Amine, 30-50 μ m	10g
23585	Glass Beads, Glycidyl, 30-50 μ m	10g

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