

# SPHERICAL®

## universal calibrants for MALDI

Series of monodisperse calibrants consisting of 4 well-spaced calibration points in each vial, allowing users to increase the frequency and quality of their MALDI

### SpheriCal® Calibration Kits

Polymer Factory offers easy-to-use standards that simplify and accelerate calibration. Our standards have raised the bar for mass precision and measurement accuracy, both for routine characterization and facile optimization for more specific applications.

### SpheriCal® Aqua Calibration Kits

SpheriCal® Aqua, Polymer Factory's latest addition to our line of calibration standards, is compatible with water as a solvent, reducing the cost of calibration and allowing users in biological sciences to avoid undesirable organic solvents. Each kit contains four well-spaced calibration points.

### Mix vs Neat

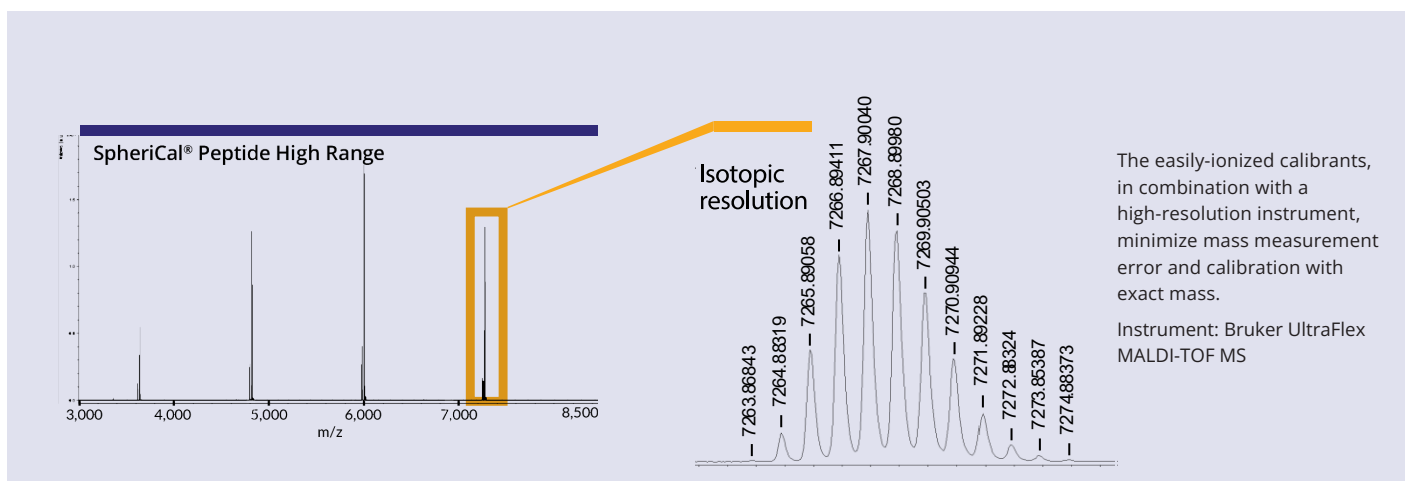
Our SpheriCal® standards come in both Mix and Neat forms. Choose from either SpheriCal® Mix standards that are supplied as pre-mixed solids containing standards, matrix and counter ion in its optimal ratio. SpheriCal® Mix is now available with a choice of matrix, including CHCA, DHB, DCTB and sinapic acid. With SpheriCal® Neat, you have the flexibility to optimize calibration with matrices and solvents of your choice.

### Why choose SpheriCal®?

- Outstanding compatibility with matrices and solvents SpheriCal® has proven to be compatible with all common MALDI matrices and almost every solvent, making it as flexible as you need it to be.
- High long-term stability with multi-year shelf life – even after make up in solution  
SpheriCal® is stable at room temperatures and when exposed to air. Avoids all the problems associated with less stable protein calibrants.
- The most accurate calibration  
SpheriCal® covers each mass range with evenly spaced, monoisotopic calibration points for the most accurate calibration.

**TIME SAVING**  
**LONG SHELF LIFE**  
**EASY-TO-USE**





Typical MALDI-ToF calibration results for SpheriCal<sup>®</sup> calibrants - Note the outstanding isotopic peak resolution of the high-range mix.

## Product and ordering information

SpheriCal is provided in various molecular weight ranges. Each product vial is sufficient for at least 100 calibrations.

Product name	Mol. Wt. range	Available in	Price (€)
SpheriCal <sup>®</sup> Peptide Low & Small Molecule Range	250 - 1,600 Da	Neat	436
SpheriCal <sup>®</sup> Peptide Low Range	500 - 1,600 Da	Mix, Neat	309
SpheriCal <sup>®</sup> Peptide Medium Range	1,600 - 3,500 Da	Mix, Neat	309
SpheriCal <sup>®</sup> Peptide High Range	3,500 - 7,500 Da	Mix, Neat	309
SpheriCal <sup>®</sup> Protein Low Range	7,500 - 15,000 Da	Mix, Neat	309
SpheriCal <sup>®</sup> Protein Medium Range	15,000 - 30,000 Da	Mix, Neat	309
SpheriCal <sup>®</sup> 10-Point	1,500 - 15,000 Da	Neat	615

Product name	Mol. Wt. range	Available in	Price (€)
SpheriCal <sup>®</sup> Kit* Low Range	500 - 7,500 Da	Mix, Neat	737
SpheriCal <sup>®</sup> Kit* High Range	7,500 - 30,000 Da	Mix, Neat	737
SpheriCal <sup>®</sup> Kit* Ultimate Range	500 - 30,000 Da	Mix, Neat	1143

\*SpheriCal can also be purchased as a kit of 3 or 5 vials covering a combined broader mass range

Product name	Mol. Wt. range	Available in	Price (€)
SpheriCal <sup>®</sup> Aqua Peptide Low Range	500 - 1,000 Da	Mix, Neat	309
SpheriCal <sup>®</sup> Aqua Peptide Medium Range	1,000 - 2,500 Da	Mix, Neat	309
SpheriCal <sup>®</sup> Aqua Peptide High Range	2,500 - 5,200 Da	Mix, Neat	309
SpheriCal <sup>®</sup> Aqua Protein Low Range	5,200 - 11,000 Da	Mix, Neat	309

## Scientific References

1. The identification of synthetic homopolymer end groups and verification of their transformations using MALDI-TOF mass spectroscopy. Yeija Li, Jessica N. Hoskins, Subramanya G. Sreerama, Michael A. Grayson and Scott M. Grayson. *J. Mass Spectroscopy*, 2010, 45, 587-611.
2. MALDI-TOF Mass Spectral Characterization of Polymers Containing an Azide Group: Evidence of Metastable Ions. Yeija Li, Jessica N. Hoskins, Subramanya G. Sreerama and Scott Grayson. *Macromolecules*, 2010, 43, 6225-6228.

## Patent, licensing and trademark information

SpheriCal<sup>®</sup> is a trademark owned by Polymer Factory Sweden AB and registered in the EU, USA, Japan, South Korea and Australia. The technology used in SpheriCal<sup>®</sup> calibrants is covered by IPR protection held by Polymer Factory. Polymer Factory Sweden AB has the exclusive worldwide right to commercialize SpheriCal<sup>®</sup> calibrant technology.

## About Polymer Factory

Founded in 2006 at the Royal Institute of Technology in Stockholm, Sweden, Polymer Factory is today a leading provider of advanced dendritic and polymeric materials, plus a contract research company. Polymer Factory holds the exclusive production, marketing and sales rights of several advanced materials. Its business strategy includes developing future ground-breaking dendritic and polymeric materials in close collaboration with clients in the pharmaceuticals and semiconductors sector.



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