

MP Biomedicals, LLC

29525 Fountain Parkway Solon, Ohio 44139 Telephone: 440/337-1200 Toll Free: 800/854-0530 Fax: 440/337-1180

mailto: biotech@mpbio.com web: http://www.mpbio.com

## TECHNICAL INFORMATION

Catalog Number: 102752, 151971, 194729

**Protamine Sulfate** 

CAS #: 9009-65-8 Source: Salmon sperm

Physical Description: Fine white to gray powder

**Description:** Protamine sulfate is a purified mixture of simple protein principles obtained from the sperm or testes of suitable species of fish, which has the property of neutralizing heparin.

Because of having much basic amino acids (mostly arginine) protamine contains far greater nitrogen than other proteins. Its molecular weight is relatively small.

Histone and other basic proteins in the testes of unmatured fishes convert into protamine along with the growth of the fishes. In the testes protamine takes the form of nucleoprotamine linked with DNA.

**USP/NF Activity:** Each mg of protamine sulfate, calculated on the dried basis, neutralizes not less than 80 USP units of heparin activity derived from lung tissue or not less than 100 USP units of heparin activity derived from intestinal mucosa.

**Solubility:** Freely soluble in hot water, slightly soluble in cold water; soluble in 0.1 M KH<sub>2</sub>PO<sub>4</sub>; practically insoluble in organic solvents. It is stable under the normal temperature and light, and does not solidify by heat.

Uses:

- Hemostatics having antiheparin activity
- Raw materials for lab to study preparations like insulin compounds, etc.
- Separation and refining of vaccines. Reagents for removing nucleic acids from enzyme solution for the purpose of easy separation and refining.

## Availability:

Catalog Number	Description	Size
	Protamine Sulfate, Highly purified, meets or exceeds U.S.P./N.F. specifications	5 gm 25 gm 100 gm
		5 gm 25 gm 100 gm
194729		1 g 5 g 10 g 25 g 100 g