3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

Poly(ethyleneimine) solution

Catalog Number **P3143**
Store at Room Temperature

CAS RN 9002-98-9
Synonym: PEI solution

Product Description
Poly(ethyleneimine) is a branched chain polymer having a ratio of 1:2:1 of primary:secondary:tertiary amines with a branching site every 3–3.5 nitrogen atoms and a general backbone of $(CH_2CH_2NH)_x$. The polymer has a cationic charge when the nitrogen atoms are protonated, so the charge density is pH dependent. There is essentially no active monomer present.

PEI has been used as a protein precipitant[1-3] and as a nucleic acid precipitant.[4] It has been used in a transfection assay.[5] PEI is used to pretreat filters to increase the binding of proteins.[6] PEI can effectively complex heavy metal ions.

This product is supplied as a 50% (w/v) aqueous solution.

The molecular weight description for this product has been revised according to the more accurate LALLS method.

M_n:[7] ~60,000
M_w:[7] 750,000

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions
Working solutions of 0.3 % are used fresh for treating filters.

Storage/Stability
Store the PEI solution at room temperature.

References
1. Shibata, T. et al., J. Biol. Chem., **256**, 7557 (1981).
2. Burgess, R.R., and Jendrisak, J.J., Biochemistry, **14**, 4634 (1975).
3. Bruns, R. et al., Anal. Biochem., **132**, 225 (1983).
4. Moldave, K., and Grossman, L., eds., Meth. Enzymology, **59**, 260 (1979).
5. Boussif, O. et al, Proc. Nat. Acad. Sci., **92**, 7297 (1995).
6. Bruns, R.F. et al., Anal. Biochem., **132**, 74 (1983).
7. Supplier Data

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