

# Poly Ethylene Glycol

## Products Description

Name :	Poly Ethylene Glycol 6000 Powder (PEG 6000)	Poly Ethylene Glycol 8000 Powder (PEG 8000)
Catalog Number :	14870-, 100g    148701, 1kg	858710, 100g    85871, 1kg
Structure :	CAS: [25322-68-3] MW= 5000-7000 g/mol	CAS: [25322-68-3] MW= 7000-9000 g/mol
Molecular Weight :		
Properties:	Form: White or slightly yellowish flakes Purity: $\geq 98\%$ Solubility: -readily soluble in water (500 g/l) at 20 °C Melting Point: Approx. 60°C	Form: White or slightly yellowish flakes Purity: $\geq 98\%$ Solubility: -readily soluble in water (500 g/l) at 20 °C -very soluble in aromatic hydrocarbons -slightly soluble in aliphatic hydrocarbons and organic solvents Melting Point: 62.2 °C Boiling Point: 250 °C at 1013 hPa Density: 1.21 g/cm <sup>3</sup> at 20 °C DNase, RNase free.

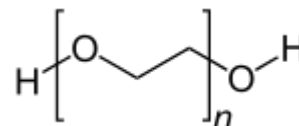
Storage Room temperature (z)

## Technical and Scientific Information

### PEGs information

PolyEthylene Glycol (PEG) is family of compounds that are polymerized from ethylene glycol monomers. Polymers with MW above 20 000MW are sometime refered more specifically as (poly(oxyethylene) . PEGs are hydrosoluble and liposoluble. They have numerous applications in biotechnologies, medical, cosmetics,...

A room temperature, and depending on temperature, PEGs with <600 MW are viscous liquid, colourless, while >800MW are cirous solids. They are used as solvent (for orgnaic salts). PEGs are stable in acids, alkalis, at high temperature, in presence of several oxidant compound O<sub>2</sub>, H<sub>2</sub>) and reducant (NaBH<sub>4</sub>).



Above Uptima PEGs are purified compounds with some polydispersivity of MW, to be used in a variety of applications. Ask for low polydispersive PEGs and synthetic PEGs (PEO).

### Applications of PEGs (general):

Uptima Poly Ethylene Glycol powders are reagent for making solutions. Use DEPC treated water for making up solutions.

- Applications examples of PEG 6000:
- Differential precipitation of DNA.
- Enhances hybridization rate of nucleic acids.

FT-148701

- Improves efficiency of end-labeling with T4 Polynucleotide Kinase(1,2).
- Used in ligation of blunt ended DNA.
- Precipitates bacteriophage  $\pm$  particles and plasmid DNA.
- Used in preparing single-stranded M13 DNA.
- Promotes cell fusion.

PEG, with magnesium, causes DNA to undergo a “psi” transition and it collapses into a highly condensed state(1). This results in macromolecular crowding(2) and increased efficiency in end-labeling.

References:

1. Lerman, L.S. (1971) Proc Natl. Acad Sci, 68, 1886.
2. Harrison, B. and Zimmerman, S. B., (1986) Anal Biochem, 158, 307.

## Related / associated products and documents

Ask for of PEGs (200 – 4 000 000) and PEO (synthetic compounds, with perfectly defined structure).

See [Product highlights](#), [catalogue](#)

See [Biosciences Innovation](#) and [e-search tool](#).

## Ordering information

Catalog size quantities and prices may be found at <http://www.interchim.com>.

Please inquire for higher quantities (availability, shipment conditions).

For any information, please ask : Uptima / Interchim; Hotline : +33(0)4 70 03 73 06

[Order on-line](#) or [Contact](#) your local distributor

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