



Product Information

Poly(vinylpyrrolidone)

Product Number **P 6755**
Store at Room Temperature

Product Description

CAS Number: 25249-54-1
Synonym: PVPP

This product is an insoluble, high molecular weight, cross-linked form of polyvinylpyrrolidone. The molecular weight is more than 1 million. It is used for the removal of phenolic impurities from protein preparations¹ and plant tissue extracts.^{2,3} PVPP has been shown to stabilize and activate these extracts.

This product has also been used in the purification of ¹⁴C-xanthine.⁴ A PVPP column was prepared, and the PVPP was equilibrated with 0.07 M phosphate buffer, 1 mM EDTA, pH 8.3. A 95 µl aliquot of the C¹⁴-xanthine solution (0.151 µmol) was applied to the PVPP column and eluted with the phosphate buffer.

PVPP has also been used in DNA extraction procedures, after the phenol/chloroform/isoamyl alcohol extraction to remove secondary metabolites and other protein/carbohydrate impurities.⁵ Acid-washed PVPP (4 g) is added to an aqueous extract, incubated for 30 minutes at 37 °C, then removed by centrifugation.

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions

This product is insoluble in water, acid, alkali, and all organic solvents.

References

1. Gaucher, G. M., m-Hydroxybenzyl-alcohol dehydrogenase. *Meth. Enzymol.*, **43**, 543-548 (1975).
2. Loomis, W. D., Removal of phenolic compounds during the isolation of plant enzymes. *Meth. Enzymol.*, **13**, 555-563 (1969).
3. Loomis, W. D., Overcoming problems of phenolics and quinones in the isolation of plant enzymes and organelles. *Meth. Enzymol.*, **31-pt. A**, 528-544 (1974).
4. Dougherty, T. M., A sensitive assay for xanthine oxidase using commercially available C14 xanthine. *Anal. Biochem.*, **74(2)**, 604-608 (1976).
5. Barns, S. M., et al., Remarkable archaeal diversity detected in a Yellowstone National Park hot spring environment. *Proc Natl Acad Sci U.S.A.*, **91(5)**, 1609-1613 (1994).

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