

Status: Currently Official on 16-Feb-2025
 Official Date: Official Prior to 2013
 Document Type: Reagents
 DocId: GUID-A312F30C-1099-4FF5-AEA9-414A1CFA365A_1_en-US
 DOI: https://doi.org/10.31003/USPNF_R2303_01_01
 DOI Ref: w7q1g

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Phosphatic Enzyme

—An enzyme preparation of microbial origin, high in both phosphatase and amylase activity, the former being the property that renders it suitable for use in the liberation of thiamine from its orthophosphate and pyrophosphate esters. Light cream-colored or slightly gray powder. Freely soluble in water. It hydrolyzes 300 times its weight of starch in 30 minutes.

Amylase Activity: Place in a test tube 5 mL of a 1 in 50 solution of soluble starch in 0.2 M, pH 5 sodium acetate buffer (containing 1.6 g of anhydrous sodium acetate in each L and sufficient glacial acetic acid to adjust to a pH of 5), and add 4 mL of water. Mix, and place in a water bath at 40°. Add 1 mL of a solution containing 0.3 mg of the phosphatic enzyme, mix, and note the exact time. After 30 minutes remove 1.0 mL of the mixture, and add it to 5.0 mL of 0.0005 N iodine in a 20- × 150-mm test tube: a clear, red color results.

Auxiliary Information - Please [check for your question in the FAQs](#) before contacting USP.

Topic/Question	Contact	Expert Committee
PHOSPHATIC ENZYME	Margareth R.C. Marques Principal Scientific Liaison	HDQ Headquarters

Most Recently Appeared In:

Pharmacopeial Forum: Volume No. Information currently unavailable

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