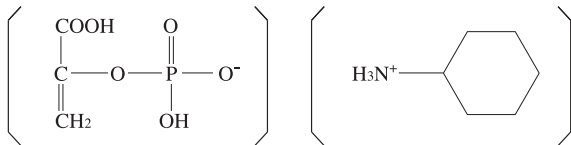


PEP

Phosphoenolpyruvate (monocyclohexyl ammonium salt) Crystalline *prepared enzymatically*

Structure



Formula

: C₃H₄O₆P • C₆H₁₄N

Formula Weight

: 267.2
(as anhydrous monocyclohexyl ammonium salt)

Specification

Purity

Determined by Enzymatic Method (PK,LDH) ≥ 95%

Water Content

< 1%

Contaminant Pyruvate

< 1%

Assay Procedure

I Spectrophotometric Method

Wavelength : 340 nm, Light path length : 1 cm

Pipette the following reagents into a cuvette

	a	b	c
Tris-HCl/K ⁺ & Mg ²⁺ (0.1 mol/L, pH 7.5/0.12 mmol/L & 0.012 mmol/L)	5.0 mL	5.0 mL	5.0 mL
ADP (50 mg/mL)	0.1 mL	0.1 mL	—
NADH (5 mg/mL)	0.1 mL	0.1 mL	—
PEP (0.25 mg/mL)	0.5 mL	0.5 mL	—
Distilled water	0.1 mL	0.2 mL	0.9 mL
LDH (100 U/mL)	0.1 mL	0.1 mL	—
PK (100 U/mL)	0.1 mL	—	0.1 mL

II Calculation

$$\frac{\Delta A \cdot V \cdot MW \times 100}{6.3 \times 10^3 \cdot d \cdot v \cdot s} \times \frac{100}{(100 - W)} = \text{Purity of PEP}$$

$$\Delta A = (A_b + A_c) - A_a$$

V = Total volume of reaction mixture (6.0 mL)

MW = 267.2

6.3 × 10³ = Molar extinction coefficient of NADH
at 340 nm (L · mol⁻¹ · cm⁻¹)

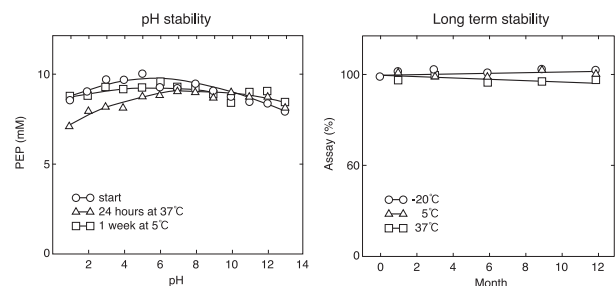
d = Light path length (1 cm)

v = Sample volume (0.5 mL)

s = Sample concentration (0.25 mg/mL)

W = Water content (%)

Reference Data



Storage

Keep container tightly closed when not in use.

Store below -20°C. Handling during short term such as transportation is allowed at 1 - 10°C. Store dry.

Cat. No./Package

Cat. No. Package
45170900 Bulk