



Concentration:

- 5 units/µl Zymolyase
- 0.5 units/µl RNase A

Description:

R-Zymolyase is a mixture of Zymolyase and RNase A. This special formula of enzymes is specially manufactured for yeast genomic DNA preparations. Our liquid Zymolyase is prepared from *Arthrobacter luteus*. The primary yeast lytic activity is β -1,3-glucan laminaripentaohydrolase. It hydrolyzes glucose polymers at the is β -1,3-glucan linkages releasing laminaripentaose as the principal product. This formula may be used as Zymolyase as it is, but be cautious that it contains RNase A.

Note: The following specifications of this data sheet is based on Zymolyase only. No RNase A data is provided.

Unit Definition:

One lytic unit is defined as a 10% decrease in absorbance at A_{800} in 30 minutes. Assay condition: 50 mM potassium phosphate, pH 7.5, 10 mM 2-mercaptoethanol in 1 ml yeast cell suspension of A_{800} 0.8 to 1.0.

Storage:

Store at -20°C for frequent usage. Store below -70°C for infrequent usage (less than one time each month). R-Zymolyase is stable for 1 year at -20°C and for many years below -70°C.

Specifications:

The essential enzyme activities are β -1,3-glucan laminaripentaohydrolase and β -1,3-glucanse. Protein contents: approximately 10-15 mg/ml. Other contaminants: protease, *ca.* 1.5 units per 10 µl; DNase, none detectable. The enzyme lytic activity is lost in 5 minutes at 60°C.

Preparation of Lyophylized R-Zymolyase:

Resuspend lyophilized R-Zymolyase (E1006) with 200 µl Zymolyase Storage Buffer.

Caution:

This reagent contains the toxic chemical betamercaptoethanol. Use in a chemical fume hood. Further precautions should be taken according to your own company's regulations. For research uses only.