

## methylenediurea deaminase

Cat. No. EXWM-4523

Lot. No. (See product label)

### Introduction

#### Description

Methylenediurea is hydrolysed and decarboxylated to give an aminated methylurea, which then spontaneously hydrolyses to hydroxymethylurea. The enzyme from *Ochrobactrum anthropi* also hydrolyses dimethylenetriurea and trimethylenetetraurea as well as ureidoglycolate, which is hydrolysed to urea and glyoxylate, and allantoate, which is hydrolysed to ureidoglycolate, ammonia and carbon dioxide.

#### Synonyms

methylenediurease

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 3.5.3.21

#### CAS No.

205830-62-2

#### Reaction

methylenediurea + 2 H<sub>2</sub>O = N-(hydroxymethyl)urea + 2 NH<sub>3</sub> + CO<sub>2</sub> (overall reaction); (1a) methylenediurea + H<sub>2</sub>O = N-(carboxyaminoethyl)urea + NH<sub>3</sub>; (1b) N-(carboxyaminoethyl)urea = N-(aminomethyl)urea + CO<sub>2</sub> (spontaneous); (1c) N-(aminomethyl)urea + H<sub>2</sub>O = N-(hydroxymethyl)urea + NH<sub>3</sub> (spontaneous)

#### Notes

This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

### Storage and Shipping Information

#### Storage

Store it at +4 °C for short term. For long term storage, store it at -20 °C~-80 °C.