



COLLOIDAL CHITIN (Borohydride reduced) (Lot 151101)

P-CHITN

12/15

CAS: 1398-61-4

Molecular Formula: $(C_8H_{13}NO_5)_n$

Colloidal chitin is a preparation of water insoluble chitin which can be used to assay *endo*-chitinase activity. This colloidal chitin has been prepared by a modification of the method of Hirano, S. and Nagao, N., *Agric. Biol. Chem.*, 52, 2111 (1988).

Borohydride reduced chitin is prepared by treating the colloidal chitin with sodium borohydride to lower the background reducing-sugar colour. This substrate is recommended for the assay of *endo*-chitinase using reducing sugar methods.

This product is equivalent to Sigma product: Chitin from shrimp shells (#C9752).

PROPERTIES

1. PHYSIOLOGICAL PROPERTIES:

Borohydride-reduced colloidal chitin is supplied as a fine grey powder. It is insoluble in water.

2. METHOD OF DISSOLUTION:

For a 10 mg/mL substrate solution: Accurately weigh 500 mg of borohydride-reduced colloidal chitin and add to a 100 mL beaker containing ~ 40 mL of water or suitable buffer. Bring the solution to the boil and remove from the heat. Allow the solution to stir for ~ 1 h. Adjust the final volume to 50 mL.

The long term stability of the prepared substrate has not been quantified.

3. STORAGE CONDITIONS:

Store dry at room temperature in a well-sealed container. Under these conditions the product is stable for > 10 years.