CELLULASE from TRICHODERMA REESEI
TENTATIVE


Information required on the applicability of Method of Assay for Cellulase

SOURCES
Commercial enzyme preparations are produced by the controlled fermentation of Tricoderma reeser and isolated from the medium

Active principles
1. Cellulase (endo-1,4-ß-glucanase)
2. Exo-1,4-ß-D-glucosidase (glucan-1,4-ß-glucosidase)
3. Exo-cellobiohydrolase (cellulose 1,4-ß-cellobiosidase)
4. ß-glucanase

Systematic names and numbers
1. 1,4-(1,3; 1,4)-ß-D-Glucan-4-glucanohydrolase (EC 3.2.1.4)
2. 1,4-ß-D-Glucoside glucohydrolase (EC 3.2.1.74)
3. 1,4-ß-D-Glucan cellobiohydrolase (EC 3.2.1.91)
4. 1,3-(1,3; 1,4)-ß-D-glucan-3(4)-glucanohydrolase (EC 3.2.1.6)

Reactions catalyzed
The enzyme preparations hydrolyze 1,4-ß-glucan linkages in such polysaccharides as cellulose, yielding ß-dextrins.

Secondary enzyme activities
Xylanase (EC 3.2.1.32)
Beta-glucosidase (EC 3.2.1.21)

DESCRIPTION
Off-white to tan amorphous powders, or liquids that may be dispersed in food-grade diluents and carriers; soluble in water but practically insoluble in ethanol, chloroform and ether

FUNCTIONAL USES
Enzyme preparation
Used in the preparation of fruit juices, wine, beer and vegetable oils

GENERAL SPECIFICATIONS
Must conform to the General Specifications for Enzyme Preparations used in Food Processing (see Volume Introduction)

CHARACTERISTICS
IDENTIFICATION

Cellulase activity (Vol. 4) The sample shows cellulase activity