α-AMYLASE from *ASPERGILLUS ORYZAE*, var.

Prepared at the 55th JECFA (2000) and published in FNP 52 Add 8 (2000), superseding tentative specifications prepared at the 31st JECFA (1987) and published in FNP 38 (1988) and in FNP 52 (1992). An ADI "Acceptable" was established at the 31st JECFA (1987).

SYNONYMS INS No. 1100

SOURCES Produced by the controlled fermentation of non-toxicogenic and non-pathogenic strains of *Aspergillus oryzae* and isolated from the growth medium

Active principles: alpha-Amylase (synonyms: diastase, ptyalin, glycogenase)

Systematic names and numbers: 1,4-alpha-D-Glucan glucanohydrolase (EC 3.2.1.1)

Reactions catalyzed: The enzyme preparations hydrolyze 1,4-alpha-glucosidic linkages in polysaccharides, yielding dextrins and oligo- and monosaccharides.

Secondary enzyme activities:
Amyloglucosidase
Proteases
Xylanase

DESCRIPTION Typically tan amorphous powders or tan to dark-brown liquids that may be dispersed in food-grade diluents and may contain stabilizers and preservatives; soluble in water and practically insoluble in ethanol and ether.

FUNCTIONAL USES
Enzyme preparation
Used in starch hydrolysis, syrup production, baking and brewing

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

CHARACTERISTICS

IDENTIFICATION

alpha-Amylase activity (Vol. 4): The sample shows fungal alpha-amylase activity