



STATUS DECISION OF CONTROLLED AND NON-CONTROLLED SUBSTANCE(S)

Substance: Alpha amylase

Based on the current information available to the Office of Controlled Substances, it appears that the above substance is:

Controlled
Not Controlled

under the schedules of the *Controlled Drugs and Substances Act* (CDSA) for the following reason(s):

- The substance is a complex protein molecule/enzyme that does not contain any controlled substances
- The enzyme is naturally occurring in saliva and pancreatic secretions, where it serves a role in polysaccharide digestion

Supporting document(s) attached:

Prepared by: Ian Grimwood Date: _____

Verified by: See email RICHARD LAING Date: _____

Approved by: _____ Date: _____
DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES

The structure is as follows:

Alpha amylase is classified as family 13 of the glycosyl hydrolases ([CAZY:GH_13](#)). The structure is an 8 stranded alpha/beta barrel containing the active site, interrupted by a ~70 a.a. calcium-binding domain protruding between beta strand 3 and alpha helix 3, and a carboxyl-terminal Greek key beta barrel domain.