

PULLULAN (Borohydride reduced) (Lot 90601a)

P-PULLBH 10/09

Pullulan is a linear I,4:I,6- α -D-glucan. The polymer consists mainly of maltotriosyl units linked α -I,6 to the next maltotriosyl unit. However, the polymer does contain a small percentage of maltotetraosyl units which are irregularly distributed within the polysaccharide.

Borohydride reduced pullulan is prepared by treating pullulan with sodium borohydride to lower the background reducing-sugar colour. This substrate is recommended for the assay of pullulanase using reducing sugar methods.

PROPERTIES:

Borohydride-reduced Pullulan is supplied as a fine white powder which is odourless and tasteless. It dissolves readily in cold water to give a clear, colourless liquid.

Viscosity: 2-3 cP (1%, w/v, 30°C)

Protein: < 0.30%

Moisture: ~ 3%

Ash: ~ 3%

STORAGE CONDITIONS:

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

METHOD OF DISSOLUTION:

Borohydride-reduced pullulan (1.0 gram) is accurately weighed and added to a 120 mL beaker containing 100 mL of water or buffer. A magnetic stirrer bar is added and the mixture is stirred on a magnetic stirrer for about 10 min (i.e. until the solution is clear). Solutions of pullulan can be stored at 4°C for several weeks in a well sealed storage bottle.

Microbial contamination is prevented by adding a few drops of toluene to the storage bottle.