



BARLEY BETA-GLUCAN (Medium Viscosity) (Lot 90603)

6/2003

PROPERTIES:

Purity:	~ 97% (on a moisture free basis).
Viscosity:	29 cSt (1% w/v; Ostwald C-type viscometer, 30°C).
Molecular Weight:	216,000.
Starch:	< 0.1%.
Arabinoxylan:	< 0.2%.
Protein:	0.4 %
Moisture:	3.5 %
Ash:	0.5 %

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:

Beta-glucan (1 gram) is accurately weighed into a 120 ml dry pyrex beaker. The sample is wet with 6 ml of 95% ethanol. A magnetic stirrer bar is added followed by 90 ml of distilled water. The slurry is immediately placed on a magnetic stirrer-hotplate and heated at a setting of 120°C with vigorous stirring. The beaker is loosely covered with aluminium foil and stirred vigorously. When the solution begins to boil, the heat is turned off, but stirring is continued until the -glucan completely dissolves (about 10 min). The solution is then adjusted to volume (100 ml).

The solution may be very slightly turbid due to the presence of trace amounts of protein.

Beta-glucan solutions can be stored at room temperature for several weeks in a well sealed storage bottle. Microbial contamination is prevented by adding a few drops of toluene to the storage bottle. If the -glucan begins to self-associate and precipitate from solution or gel, then the solution should be heated to 90-95°C for a few minutes and then shaken vigorously.