

Deltazyme AMG

Product Code: DG-DZAMG (Low Carb Enzyme)

FOOD GRADE PRODUCT

Description: Deltazyme AMG is an Amyloglucosidase produced by during the fermentation of *Aspergillus niger*.

Deltazyme AMG is capable of producing a high degree of true attenuation in grain fermentation when added to the fermenter. It can be used as a primary substitute or increase attenuation permitting production of high alcohol beers. Treatment of wort with Deltazyme AMG can also result in the production of low carbohydrate diabetic beer of increased alcohol strength. Deltazyme AMG hydrolyses both the hydrolysing (1-4) and-(1-6) glucose linkages in starch allowing for almost complete conversion of starch to glucose.

Country of Origin: Deltazyme AMG is blended in Australia from local and imported ingredients

Optimal Temperature: The optimal temperature for Deltazyme AMG is 70°C with > 80% activity in the range 65°-75°C

Optimal pH: The optimal pH for Deltazyme AMG is 4.0 with >80% activity in the range pH 3.0 - 4.5

Specifications: All analytical methods are available on request.

Activity: >400 AMGU/ml
Specific Gravity: 1.07 Typical
pH: 4.0 Typical

Total heavy metals: <40ppm
Lead: <10ppm
Arsenic: <3ppm

Microbiological: Total plate count: <50,000/ml
Coliforms <30 CPU/m
Salmonella absent in 25 g
E.coli absent in 25g
Yeast & Moulds <200/ml
T.E <30ml

Recommended Dose Rate:**Brewing Industry**

- Mash and run off normally to the copper/kettle or to a special wort holding tank.
- Adjust temperature of the wort in the cooper/holding tank to 65°C. This temperature is important.
- Add Deltazyme AMG at the rate of 0.05 - 0.10 kg/hectolitre to the wort (depending on the degree of final attenuation required).
- Hold @ 65°C for 2-4 hours.
- Proceed with copper boil.

Storage: Deltazyme AMG will maintain the declared activity for 3 months when stored @ 20°C, a 1-2 % drop in activity per month can occur subsequently. The Recommended shelf life is 12 months

Packing: Standard packaging for Deltazyme AMG is in 25kg drums, 5kg and 1kg containers.

Issue No:	Summary of changes made from previous version:	Actioned by:	Authorised by:
4	Change of logo	Chui Choo Tan	Michael Watson