

GLUCO6

Next Generation Enzymes for Saccharification (Grain Processing)

PRODUCT INFORMATION

In the production of alcohol and spirits from grain, the saccharification enzymes degrade gelatinized starch and dextrins into fermentable sugars. These sugars are then converted or fermented by the yeast cells into alcohol.

Delhi Molecular Company has developed a range of saccharification products in order to enhance starch processing in grain-based distilleries. DMC's saccharification product, **Gluco6**, consists exo-1, 4-alpha-D-glucosidases (glucoamylases) obtained from *Aspergillus niger*.

GLUCO6 CHARACTERISTICS

ph Range	3.5 – 4.5
Temperature Range	30-75 °C
Dosage Range	0.75 – 0.85 kg/MT Starch
Activity	1200-1500 Unit/g

ADVANTAGES OVER OTHER ENZYMES

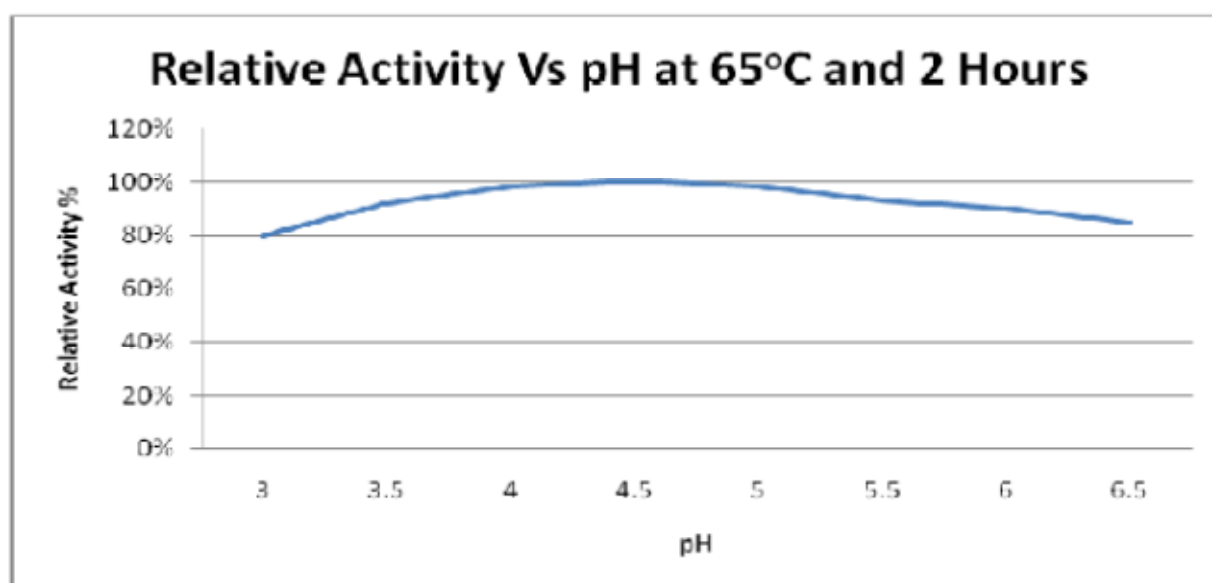
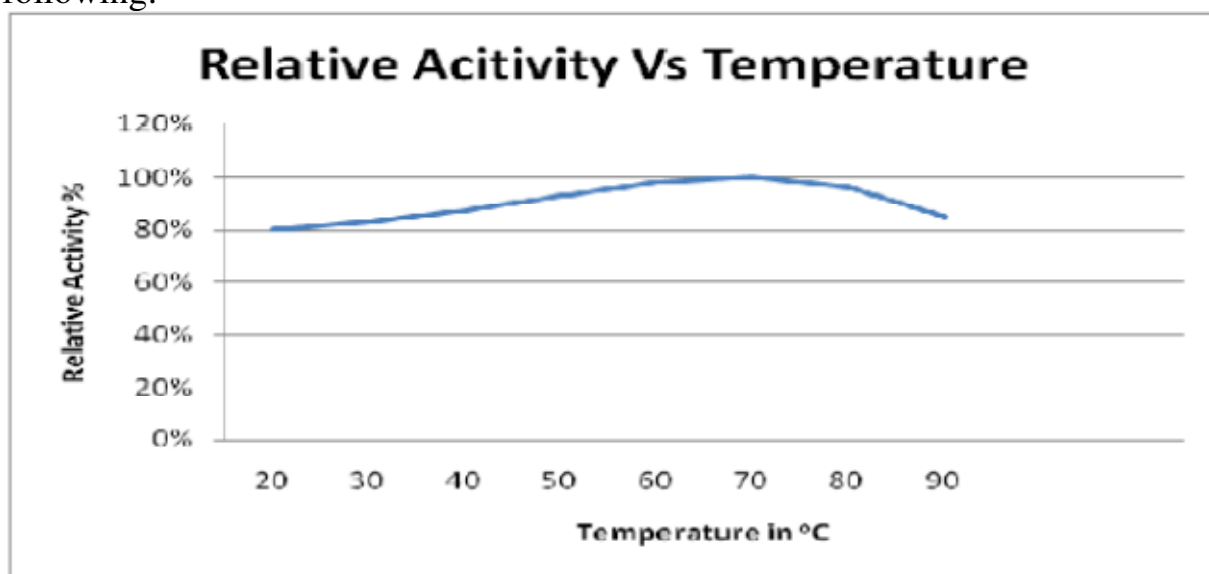
For the production of Alcohol from grain substrates, **Gluco6** provides the following benefits:

- Works over broader pH and temperature range
- More Efficient degradation of dextrins
- Reduced risk of infection because of working at lower temperatures
- Lower treatment costs and dosages
- High concentration delivers savings in logistics
- Faster Fermentation time

- Lower By product Formation
- Enhanced Alcohol Recovery
- Lower Solids in Thin Stillage

PERFORMANCE

The temperature and heat-stability performance of **Gluco6** is shown in the following:



USES

For optimum results, add **Gluco 6** just after liquefaction to the pre-tank or saccharification tank when the temperature has cooled to 65 °C.

APPLICATION GUIDELINES

Gluco 6 can be used in pre-saccharification or in the simultaneous saccharification and fermentation process (SSF) at a dosage of 0.75 - 0.85 kg / MT of starch based on the substrate used.

STORAGE

Ideal storage conditions are 0-25 °C (32-77 °F) in sealed packaging in a dry environment protected from the sun. The products have been manufactured for optimum stability. However, enzymes gradually lose activity over time. Extended storage and/or adverse conditions such as higher temperatures or increased humidity may lead to a higher dosage requirement. Other handling instructions are available in the Material Safety Data Sheet.

SHELF LIFE

Gluco 6 is stable under recommended storage conditions for a period of 3 months with less than 5% drop in activity. Drop in activity can be compensated

SAFETY & ENZYME HANDLING

Gluco 6 is non toxic, non hazardous and non corrosive. Inhalation of enzyme liquid should be avoided. In case of contact with the skin or eyes, promptly rinse with water for at least 15 minutes