

## ALPHA4 2X

*Next Generation Enzymes for Liquefaction (Grain Processing)*

### PRODUCT INFORMATION

Alpha4 2X is an Alpha-Amylase that hydrolyses (1,4)-alpha-D-glucosidic linkages in starch substrates. Alpha4 2X is heat stable and efficient in viscosity reduction over wide range of pH.

Alpha4 2X is an endo amylase derived from select strains of Bacillus sp.

### Application

Alpha4 2X is used during the slurry preparation and liquefaction process. As per the plant condition we can decide to split the dosages in slurry and liquefaction tanks Alpha4 2X is effective in viscosity reduction and during high DS liquefaction.

The recommended parameters are to maintain the liquefaction temp 83-85 C with overall retention time of 150-180 minutes to achieve optimum results.

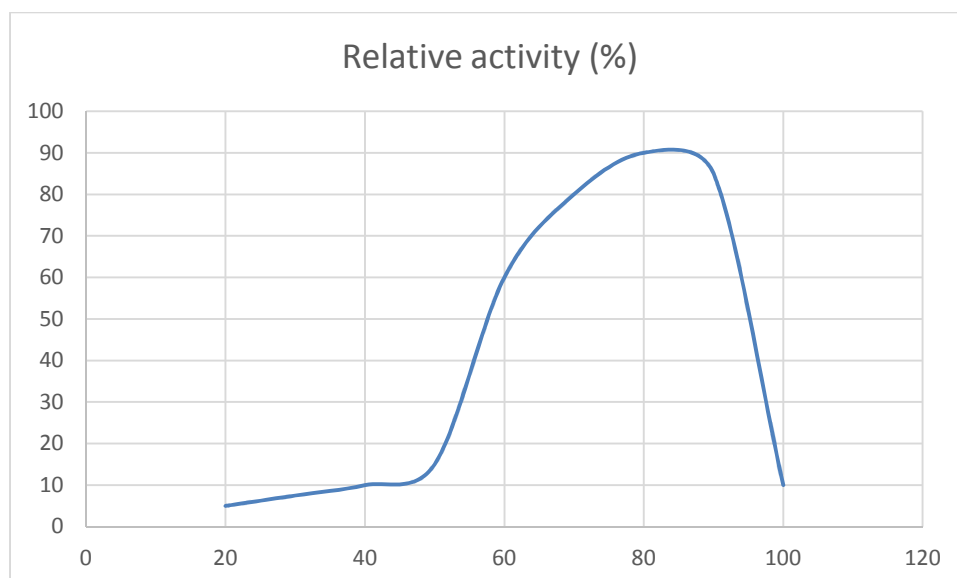
### Product specifications-

Form	Light brown liquid
Odour	Slight fermentation
Solubility	Miscible in water
pH Range	5.0 – 6.5
Specific gravity	1.0 – 1.2

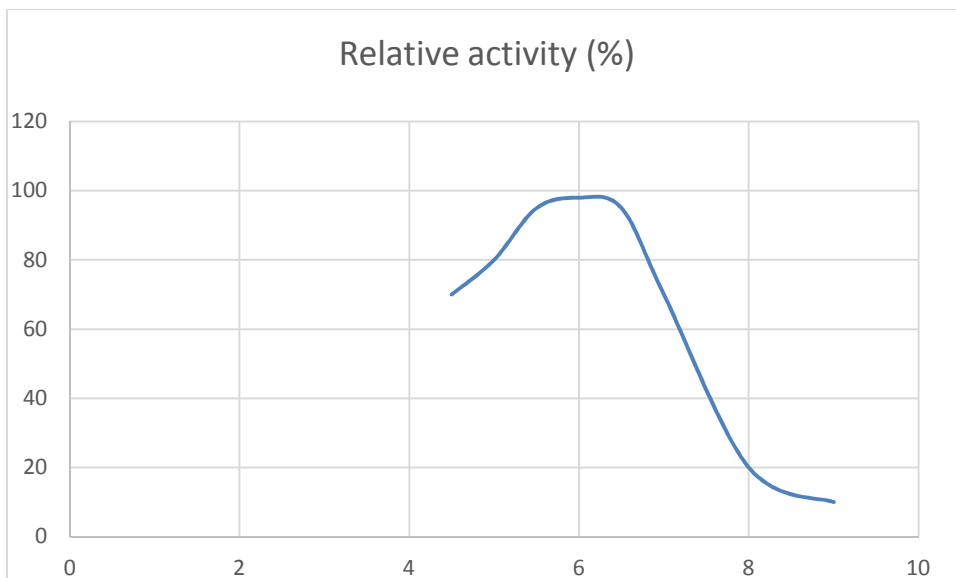
## Recommended operating parameters

Dosage	0.40 – 0.50 KG/Per ton of starch
Optimum pH	5.5 – 6.0
Optimum Temperature	83 - 85 C
Retention time	150-180 minutes

**Please see the below graph for Temp profile of Alpha4 2X**



**Please see the below graph for pH profile of Alpha4 2X**



## **Safety and Handling procedure**

**Storage conditions-** This enzyme has been formulated for optimal stability. The recommended storage condition is 0-25 C. Container should be dry, sealed and kept away from sunlight.

**Safety and Handling procedure-** Enzymes may cause allergic reactions, Inhalation of dust and aerosol should be avoided. Spilled enzyme should be cleaned with the plenty of water immediately. Please Read our safety manual for complete details.