

## How we manufacture Pinnacle Wine Yeast...

### STEP 1

#### Preparation of Raw Materials

##### The Pure Yeast Culture

The production process begins with a pure wine yeast culture, grown on nutrient slopes under sterile conditions at AB Biotek's Scientific & Technical Centre. This pure culture is then transferred to the quality control laboratory at an AB Biotek wine yeast factory.

### STEP 2

#### Production of Seed Yeast

##### The Inoculum

The pure culture is inoculated into the seed fermenter containing sterilised wort and other nutrients. The wort, a rich source of sugars essential for cell growth, is derived from clarified sugar cane molasses. Once the inoculum has grown to the desired cell number it is transferred to the main fermenter.

### STEP 3

#### Fermentation

Once in the main fermenter the yeast is fed sterile molasses, nutrients and oxygen at a regulated rate to ensure optimum growth.

### STEP 4

#### Separation & Washing

At the end of fermentation the yeast is harvested and washed using centrifugal separators, then chilled to  $< 4^{\circ}\text{C}$ . The yeast is now a light cream coloured suspension at ~20% solids referred to as cream yeast.

### STEP 5

#### Dewatering & Drying

The cream yeast is first dewatered into a 'crumble' of about 30-34% solids using either a filter press or a rotary vacuum filter drum. The yeast crumble is then extruded and dried in a fluidised bed dryer using dehumidified air.

### STEP 6

#### Packaging & Storage

Dry yeast >93% solids is cooled after drying then packed as quickly as possible into vacuum packs to minimise oxygen contact and moisture exposure. Vacuum packs guarantee oxygen and moisture impermeability throughout the shelf-life of the product.

