



Complete yeast nutrition for healthy fermentation

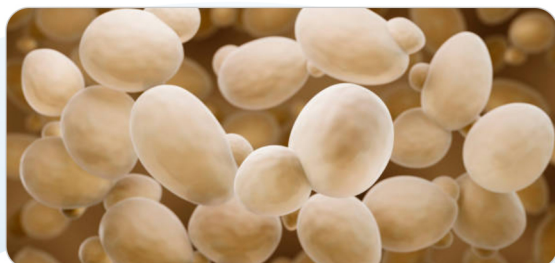
Effygrow™ is a scientifically formulated nutrient complex containing essential growth factors, trace minerals, vitamins, & metabolic enhancers designed to optimize yeast physiology. It supports robust cell proliferation, improved metabolic activity, & enhanced stress tolerance, ensuring consistent fermentation performance across molasses & grain-based feedstocks. Effygrow™ enables healthy yeast propagation, improved fermentation efficiency, & reliable alcohol yield.

Key Actions of Effygrow: It Provides

Effygrow™ delivers a balanced spectrum of critical nutrients required for optimal yeast growth and fermentation performance by providing:

- Readily assimilable nitrogen to support rapid yeast propagation & protein synthesis.
- Bioavailable amino acids & peptides that enhance cellular metabolism & improve yeast vitality.
- Essential micronutrients, including vitamins (Thiamine, Biotin, Pantothenic Acid) & minerals (Magnesium, Zinc), crucial for enzymatic activity & metabolic efficiency.
- Vital sterols that strengthen cell membrane integrity, improve stress tolerance, & support efficient nutrient transport & fermentation performance.

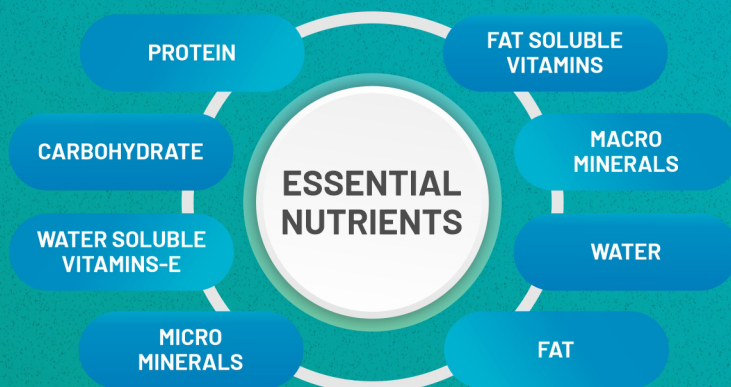
Nutrients required not only during active growth, but also during the Stationary phase of fermentation and to prevent loss of viability as ethanol accumulates in the medium



Bioavailable Yeast Nutrient



- Promotes Healthy, Efficient Fermentation
- Reduces Off-flavors & Enhances Aroma
- DAP-free Formula
- 100% Accessible Nitrogen For Yeast
- Works In Any ABV Range. Even High Alcohol Meads & Wines



Typical Nutrient Requirements of Yeast

Growth Phase:

- **Carbon/Energy Sources** - glucose, fructose, sucrose
- **Nitrogen Sources** - amino acids, ammonia, nucleotide bases, peptides
- **Phosphate Sources** - inorganic phosphate, organic phosphate compounds
- **Sulfur Sources** - Inorganic sulfate, organic sulfur compounds
- **Minerals & Vitamins** - Mg, Mn, Zn, Cu, K, Biotin, Pantothenate, Thiamine, Inositol

Stationary Phase:

- More of Fatty acids & Sterols for cell stability

Method of Application:

The required quantity of Effygrow is calculated based on mash volume of fermentation and mixed with 5 to 6 parts of water. The uniform suspension is then added to the fermentation in single dose.

Dosage:

In the Pre-fermentor evaluate @ 1000 ppm. In the main fermentation evaluate @ 100 ppm The given dosage requirement varies based on feedstock properties. Contact Praj technical support for Optimum dose.

Packing:

Effygrow is supplied in laminated poly - pouches of sizes custom made to distillery production capacity.



Shelf Life:

Store away from direct heat and sunlight. Preferably below 25 Deg C. When stored under recommended conditions in original container, the product is stable for one year.

Effygrow Typical Properties:

Appearance	White or off white coloured powder
Bulk density - Kg /M ³	500 to 700
pH	5 to 7
Moisture -% W / W	3 to 6
Key Ingredients	Organic assimilable nitrogen, trace minerals, Vitamin and Enzyme/s

Advantages of Effygrow:

- Promotes and sustains optimum yeast growth
- Increases efficiency & alcohol yield
- High rate of yeast growth & metabolism
- Low residual sugar loss
- Low by-products in mash
- Improved neutral spirit quality
- Reduction in spent wash quantity
- Reduction in fermentation hold up time

This document is intellectual property of PRAJ Industries limited and is generated for confidential business purposes. It should not be used for purposes other than designated purpose or reproduced without written permission from "PRAJ INDUSTRIES LTD, "Praj Tower", 274 & 275/2, Bhumkar Chowk- Hinjewadi Road, Hinjewadi, Pune 411 057, India. (WWW.PRAJ.NET) Seller warrants that this product formulation confirms to its description and is reasonably fit for the purpose referred to in the directions for use when used in accordance with the directions under normal conditions. The conformance of product performance will be done strictly by the analytical protocols given by the seller. All risks on account of use of the product not in accordance with the directions will be with the buyer. Seller makes no other warranty or representation of any kind, express or implied, about the product, including NO IMPLIED

WARRANTY OF MERCHANTABILITY OR FITNESS OF THE GOODS for purposes other than specified by the seller. No such warranties shall be implied by law and no agent of seller is authorized to alter this warranty in any way except in writing with a specific reference to this warranty. The exclusive and maximum possible remedy against the seller shall be a claim for damages not to exceed the purchase price of the product, without regard to whether such a claim is based upon breach of contract/ warranty. Any dispute, controversy or claim arising out of this contract or breach thereof, shall be settled by arbitration in accordance with the provision of Indian arbitration and reconciliation act 1996 and shall be governed by Indian laws and shall have exclusive jurisdiction of Pune Maharashtra Court.