



# DSPN-M

## ***Yeast nutrient formulation for Urea and DAP replacement in Molasses fermentation***

In ethanol fermentation, reliance on conventional nutrient sources such as urea and DAP can lead to inefficient nutrient utilization, stressed yeast performance, and inconsistent fermentation efficiency, especially under high gravity or recycled wastewater conditions.

An innovative solution to provide essential nutrients along with Micro & Macro elements required for the better yeast growth. DSPN-M is a proprietary nutrient blend specifically developed to replace conventional urea and DAP supplementation, supporting healthier yeast growth, improved productivity, and efficient fermentation performance across sugarcane-based feedstocks.

### **Mode of Action**

DSPN-M provides a balanced supply of permeable nutrients required for yeast metabolism and ethanol production:

- Supplies inorganic phosphorus through enzymatic hydrolysis of complex phosphorus forms present in cane molasses
- Provides potassium and sodium for maintaining Na<sup>+</sup>/K<sup>+</sup> balance and regulating mineral transport through yeast cell wall
- Supplies consumable sulphur for essential metabolic functions
- Delivers trace precursors such as Zn and Mg for proper metabolic shift and enzyme activity
- Provides essential vitamins and minerals to support yeast growth and fermentation efficiency

### **Product Key Benefits**

- Replaces conventional urea and DAP supplementation
- Improves yeast growth and healthy progeny formation
- Enhances fermentation efficiency under stressed conditions
- Supports faster PF development
- Reduces fermentation time through healthier cell counts
- Improves performance under recycled wastewater conditions
- Enables smoother and hassle-free fermentation process

## Product Application

Applicable in ethanol fermentation processes using sugarcane-based feedstocks.

- Used as enzyme nutrient composition for yeast
- Added in yeast propagation vessels, pre-fermenters, and fermenters for improved efficacy

## Dosage

- 50-60 ppm based on PF wash volume
- 20-30 ppm based on MF wash volume

## Product Characteristics

Composition: Nutrient mixture  
Form: Powder  
Appearance: Off-white to pale yellow/brown

## Product Packaging

- 25 kg HDPE drums with 1 kg aluminium packs

## Product Shelf Life

- Up to 2 years (under recommended storage)

## Product Handling

- Use appropriate PPE including gloves and eye/face protection
- Avoid prolonged exposure and direct contact
- Store under recommended dry conditions
- Follow MSDS guidelines for safe handling



ISO 9001:2015 Certified | FSC 22000 Certified

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Certifications:

