



For effective Cassava based Ethanol Production

Praj's Bioproducts Division specializes in the development of Innovative Solutions that add Economic Value to Biochemical processes. The expertise comes from

Vast experience of design and operation of Continuous, Fed-batch and Batch type fermentation processes.

Comprehensive knowledge of feedstocks composition & its effect on fermentation & yeast.



Typically challenge for Cassava to Ethanol fermentation:

Cassava Slurry can contain high levels of organic acids, such as lactic acid or acetic acid, which can inhibit ethanol fermentation. Lactic acid levels often rise when there's contamination, suggesting that lactic acid bacteria are the most common contaminants.

Effycasv is the practical solution to achieve high yielding stable fermentation process. The product is a combination of specific micro-elements and bio-chemicals. The product is formulated after careful study of the parameters and requirements of process.

Key Actions of Effycasv in Fermentation:

Eliminates bacterial contamination inhibiting Bacterial metabolism & controlling formation of Volatile & Lactic Acid.

Converts non-fermentable carbohydrates into fermentable sugars

Provides vital elements & growth factors for yeast growth

Prevents bad effects of yeast inhibitors

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Advantages of Effycasv:

- Increases efficiency & alcohol yield by 5 to 10 Lit./MT of Cassava
- Increased alcohol concentration in mash by 0.5 to 1.0%
- High rate of yeast growth & metabolism
- Low residual sugar loss
- Prevention of bacterial contamination & reduction in mash volatile acidity
- Low by-products in mash
- Improved neutral spirit quality
- Reduction in spent wash quantity
- Possibility of spent wash recycle In fermentation
- Reduction in fermentation hold up time
- Longer duration of continuous fermentation operations Without reduction in performance

Effycasv Typical Properties:

Appearance	White or off white coloured powder
Bulk density - Kg/M ³	200 to 600
pH	4 to 7
Moisture % w/w	2 to 6



Method of Application:

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

Dosage:

Effycasv is added @ 3.0 to 5.0 ppm of fermentation mash.

Packing:

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



Shelf Life:

Store away from direct heat & sunlight. Preferably below 30 Deg C. When stored under recommended conditions in original container, the product is stable for one year.