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YN-GIN

S P I R I T F E R M E N T

Low-congener active dried yeast formulated with optimised nutrition for production of high purity neutral spirit for use in making gin or other botanical-infused spirits.

PRODUCT DESCRIPTION & FUNCTION

YN-Gin is based on a low-congener active dried yeast producing minimal fusel oils, esters and other fermentation by-products, selected for use in neutral spirit applications for making gin or other botanical-infused spirits – formulated with optimized nutrition, YN-Gin can be used with a variety of substrates including potatoes, fruit, or highly refined sugars which contain little or no natural nutrition.

YN-Gin contains a chemically defined nutrient complex optimized for production of high purity neutral spirit alcohol. The nutrient complex in YN-Gin contains all the essential macro and micro nutrients required for healthy fermentation, including nitrogen (urea-free source), phosphate, magnesium, B vitamins and trace minerals. Note that YN-Gin contains high levels of sodium salts so is not recommended for fermented beverage alcohol not intended for distillation.

Recommended for: Fermentation of wash to produce Gin and other botanical-infused spirits from wheat, potato grains, fruit, or refined sugar.

Organoleptic qualities: Wash fermented with YN-Gin has very low levels of higher alcohol and esters and yields a Gin with a clean and neutral flavour and aroma profile while enhancing citrus notes in the final product.

TECHNICAL CHARACTERISTICS

Yeast Classification	Saccharomyces bayanus
Temperature tolerance	20-32 °C (68-90 °F) (optimum 25-32 °C / 77-90 °F)
Alcohol Tolerance	Approx. 18% ABV
Viable Yeast Cells	> 1.0 x 10 ⁹ cfu/g
Total Bacteria	< 2 x 10 ⁴ cfu/g
Wild Yeast	< 2 x 10 ⁴ cfu/g
Coliforms	< 20 cfu/g
Pathogens (salmonella, E. coli etc)	Absent in 25 g
Lead	< 2 mg/kg
Arsenic	< 1 mg/kg
Heavy Metals (as Pb)	< 10 mg/kg
GMO Status	GMO Free

DOSAGE & APPLICATION

Pitch rates: suggested rates are as follows (optimisation through bench trials is recommended):

Target ABV for fermentation:	8 %	10 %	12 %	14 %
YN-Gin Dosage:	3.8 g/L	4.5 g/L	5.4 g/L	6.0 g/L

Pitching method: YN-Gin requires agitation to dissolve nutrient salts so cannot be pitched directly without mixing facility. For indirect pitching, pre-mix with 10x times its weight of water at 30-35 °C (86-95 °F) and mix for 5 minutes before pitching. Note that YN-Gin is not suitable for propagation or post-fermentation recovery for re-use due to nutrient depletion during fermentation.

Note: Rehydration is only required for pre-dissolving nutrients rather than yeast activation. It is important to minimise contact-time (ideally < 15 minutes) to avoid high nutrient concentrations harming the yeast. Trials may be required to determine impacts of longer contact periods on yeast viability and fermentation kinetics.

Fermentation temperature: YN-Gin can tolerate up to 32 °C (90 °F) and performs optimally in the 25-32 °C (77-90 °F) range.

pH Tolerance: YN-Gin ferments optimally at pH 4-6 but can still operate outside of this range (e.g. pH 3.5-7). It is best practice to monitor pH as it is likely to drop as fermentation progresses. If possible, avoid levels below pH 3.5 to avoid prolonged fermentation times.

PACK SIZES

1000g bags or 25kg poly-lined paper sacks.

SAFETY

This material is non-hazardous when used as directed. SDS available on request.

STORAGE

25 kg sacks: Store in original, sealed packaging away from direct sunlight. If stored below 10 °C / 50 °F this product will have a shelf life of up to 24 months. At 20 °C / 68 °F storage temperature, shelf life will be reduced to 12 months. After opening, re-seal tightly and keep refrigerated below 10 °C / 50 °F for up to 6 weeks.

1000 g bags: Store in a cool, dry place away from direct sunlight for a shelf life of 18 months. After opening re-seal tightly and keep refrigerated below 10 °C / 50 °F for up to 2 weeks.