

S-RUM

ROBUST SPIRIT FERMENT

A robust yeast and nutrient complex for urea-free fermentations, for the production of rum. S-RUM is a specialist rum distiller's yeast with optimised nutrition, formulated for high tolerance to temperature and osmotic pressure, and developed to ferment sugarcane or molasses washes up to approximately 14% ABV.

Product Description & Function

S-RUM is based on a non-diastatic, highly robust distiller's yeast with high tolerance to temperature and osmotic pressure. Formulated with a complete, chemically-defined nutrient complex, S-RUM is optimised for sugarcane or molasses wash fermentations up to approx. 14% ABV.

Although primarily intended for use molasses or sugarcane juice, S-RUM can be used with any fermentable sugar substrate for production of alcohol wash for up to approx. 14% ABV. For optimum results, S-RUM should be used to ferment sugarcane juice up to 14% ABV or molasses solution with a gravity of up to 1.150 (34.2°Plato) to achieve a maximum ABV approx. 12%.

The nutrient complex in S-RUM contains all essential macro and micro-nutrients required for a healthy fermentation, including nitrogen (urea-free source), phosphate, magnesium, B vitamins and trace minerals.

Recommended For

Fermentation of wash to produce rum or cachaça spirit.

Organoleptic Qualities

Wash fermented with S-RUM has high levels of esters and yields a rum spirit with a rich and complex, well-rounded flavour and aroma profile.

Note: Due to the osmotic pressure, maximum alcohol from pure molasses solutions is approx. 12% ABV.

Technical Characteristics

Yeast Classification	Saccharomyces cerevisiae
Temperature Tolerance	20-37°C (68-99°F) (optimum 30-37°C / 86-99°F)
Killer Factor	Neutral
Alcohol Tolerance	Approx. 14% ABV
Viable Yeast Cells	> 1.8×10^9 cfu/g
Total bacteria	< 3×10^3 cfu/g
Wild Yeast	< 3×10^2 cfu/g
Mould	< 3×10^2 cfu/g
Coliforms	< 30 cfu/g
Pathogens (Salmonella, E. coli etc)	Absent in 25 g
Lead	< 6 mg/kg
Arsenic	< 2 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%
S-RUM dosage:	2.5 g/L	3.0 g/L	3.6 g/L	4.0 g/L

Pitching Method

S-RUM requires agitation to dissolve nutrient salts so cannot be pitched directly without a mixing facility. For indirect pitching, pre-mix with 10 times its weight of water at 25-30°C (77-86°F) and mix for 5 minutes before pitching. Note that S-RUM 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

S-RUM can tolerate up to 37°C (98.6°F) and performs optimally in the 30-37°C (86-99°F) range.

pH Tolerance

S-RUM ferments optimally at pH 4-5 but can still operate outside of this range (e.g. pH 3.5-6). 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

1 kg packs, or 25 kg 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.

1 kg packs: 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.