# MURPHY & SON

# BRING FORTH THE FLAVOUR

### HARD SELTZERS MADE EASY

- Fast Fermentation Flavourless base to paint your flavour masterpiece
- The simple way to expand your target customer base High ABV achievable

#### JUST ADD SUGAR YEAST NUTRIENT KIT

**Just Add Sugar** is a bespoke yeast vitamin formulation to provide the building blocks required for healthy yeast – perfect for fermenting high gravity sugar washes, so it the ideal key for hard seltzers and sugar-based ferments.

Order the Just Add Sugar kit and receive a unique buffer powder blend specially formulated to complement the Just Add Sugar nutrient. This blend of buffer ensures a balanced intracellular pH in yeast whilst protecting from the inhibitory effect of organic acids during sugar fermentation. The Just Add Sugar kit also comes with our house-blended Magnesium Sulphate Solution providing the cofactor needed during glycolysis. Available as individual components to help you fine tune your perfect blend.

#### **PRODUCTION RESULTS**



Figure 1: Lab trial fermentation plot showing pH, ABV and gravity for low and high gravity sugar fermentation.

A) Ready To Drink - Low Gravity Fermentation (5% ABV)B) High gravity fermentation (17% ABV).

Graphs above show the pH, ABV and gravity readings for the completed 5.12 and 17.2% ABV, respectively. Both fermentations attenuated with a pH above 4.0. The final gravity was 0.995 and 0.996, respectively. The fermentation progressed well and created a base with the required properties.



Hard seltzer fermentation process involves the fermentation of sugar to produce a neutral alcohol base. The wide range of sugar available as yeast food in the production of hard seltzer contributes to the differences between each hard seltzer variety. Cane sugar, honey, agave, dextrose, sucrose, and invert sugar are some of the sources of sugar used in hard seltzer production.

The flavouring depends on the seltzer brand and can cater for a wide range of preferences. Some may choose to spike carbonated water with a distilled alcohol such as vodka while others are looking to craft their own from scratch with sugar fermentation.

## **"JUST ADD SUGAR NUTRIENT** SUCCESSFULLY ACHIEVES A **FERMENTED SUGAR BASE**"

#### **HOW DOES IT WORK?**

Sugar fermentation lacks the nutrients (particularly free amino nitrogen) which helps strengthen yeast cell wall and prepare them for the fermentation process.

The absence of certain vitamins, minerals and amino acids also contribute to the relatively slow or stuck fermentation that occurs. Hence, the choice of an external nutrient source is pivotal in the hard seltzer fermentation process.

Just Add Sugar nutrient successfully achieves a fermented sugar base for higher % ABV targets so that a more concentrated version can be made and liquored back later.

#### **APPLICATION**

The Just Add Sugar, Magnesium Sulphate Solution and Buffer the acid slayer should be added after sugar boil preferably below 60°C. An advised rate of application is provided with the kit for each component. The application rate varies based on the fermentation volume and target ABV.

#### PACKAGE SIZE

Each product can be bought separately or together in a kit available in 2 sizes for either 5bbl or 10bbl breweries. The kit is made up of 3 products;

Yeast Vit- Just Add Sugar- Yeast vitamin (5kg, 20kg) Magnesium Sulphate Solution (25kg) Yeast Vit- Buffer the Acid Slayer- Buffer solution (5kg, 20kg)

Contact our technical sales team for best yeast advice!

## WANT TO KNOW MORE? **GET IN TOUCH**

If you would like to know more about what we do, head to our website **murphyandson.com** or to speak to our technical support team, email techsupport@murphyandson.co.uk



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#### Quality, Consistency & Support