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Approved By:	Philip Woodnutt

Technical Data Sheet

Mango Madness Dehydrated Yeast

Product Description

Mango Madness Dehydrated Yeast is developed by WHC Lab.

Introducing Mango Madness yeast, an innovative and cutting-edge strain selected to revolutionize the brewing process. With its unique aromatic profile, thermotolerant properties and ability to accelerate fermentation. By using Mango Madness yeast, breweries can achieve faster turnarounds, increasing their production capacity without compromising on the quality and flavor profiles of their hop forward beers.

The yeast produces a guava and mango aroma and gives high levels of biotransformation, a diacetyl rest is not needed with this yeast strain. Dry hop can be preformed at elevated temps in the 15°C to 25°C degree range and associated hop creep is lower then other IPA strains. Mango Madness yeast thrives in high-temperature environments, allowing for fermentation at elevated temperatures beyond the capabilities of traditional yeast strains. This thermotolerance not only enables brewers to shorten fermentation and conditioning times significantly but also reduces energy costs associated with cooling.

Guidelines

Oxygenation and/or rehydration may not be needed for generation 0 but may be beneficial. It is recommended to have a pitch rate of at least 30g per hl of wort for a standard gravity brew (1.045). Pitch rate is between 30-100g/hl of wort.

The intended fermentation temperature range is 31°C to 37°C [88°F to 99°F]

Ingredient Declaration

Yeast	98.8% to 99.2%
Emulsifier E491*	0.8% to 1.2% (*Sorbitan Monostearate)

Technical Specification

Yeast Strain	*Saccharomyces cerevisiae*
Dosage	*30-100g/hl*
Fermentation Temperature	*31°C to 37°C* *88°F to 99°F*
ABV Tolerance	*17%*
Nitrogen Demand	*Very High*
Attenuation	*76% to 80%*
Flocculation	*Low*
Weight	*0.5 kg*

Physical, Chemical and Microbiological properties

Parameter	Unit of Measure	Value	Specification Value
Appearance	-	Fine granules *(typically 3mm particle size)*	-
Powder flow characteristics	-	Free flowing granules	-
Odor	-	Weak characteristic yeast smell	Typical
Color	-	Light brown/beige	Light brown/beige
Solubility	-	Miscible in water & ethanol solutions	-
Dry matter	%	95.4	> 92
Moisture	%	4 to 6	< 8
Total Yeast Plate Count	Cfu/g	1.3×10^{10}	$>10^{10}$
Direct Live Cell Count	Cells/g	1.9×10^{10}	$> 1.9 \times 10^{10}$
Lactic Acid Bacteria	Cfu/g	< 10	$< 10^{3}$
Acetic Acid Bacteria	Cfu/g	< 10	$< 10^{4}$
Wild Yeasts	Cfu/g	< 10	$< 10^{5}$
Moulds	Cfu/g	< 10	$< 10^{2}$
Coliforms	Cfu/g	< 10	$< 10^{2}$
Escherichia coli	Cfu/g	Absent in 1 g	Absent in 1 g
Staphylococcus aureus	Cfu/g	Absent in 1 g	Absent in 1 g
Salmonella spp	Cfu/g	Absent in 25 g	Absent in 25 g
Listeria monocytogenes	Cfu/g	Absent in 25 g	Absent in 25 g

Allergens*

Mango Madness Dehydrated Yeast does not contain added allergens.
**EU Regulation 1169/2011 (Food Information Regulations) (Annex II)*

GMO

Mango Madness Dehydrated Yeast does not contain genetically modified organisms or materials.

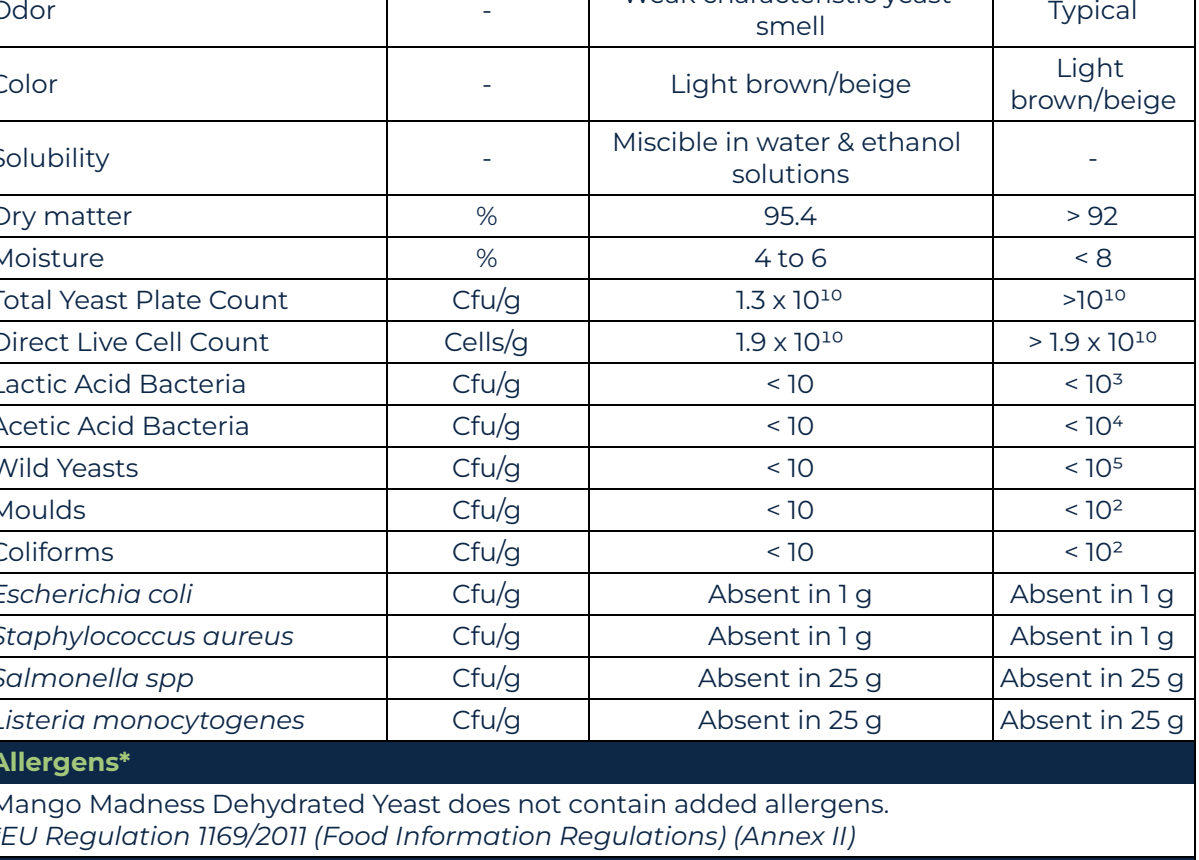
Packaging

Mango Madness Dehydrated Yeast is available in 500g vacuum-packed silver foil packs. This material complies with relevant food-contact legislation, including, EU Regulation 1935/2004 (materials intended for contact with food), EU Regulation 1245/2020 (plastic materials intended for contact with food)), EU Regulation 2023/2006 (GMP for materials intended for contact with food), and FDA CFR 21 (174-179) (USA).

Storage and Handling

Storage Conditions:	Store at cool to ambient temperatures (ideally 5°C to 15°C **or** 41°F to 59°F), dry, and well-ventilated environment.
Shelf life:	3 years from date of production, if vacuum seal is not broken, and if stored as outlined above.
Handling:	Once opened, re-seal to keep out air and water. For best results, store re-sealed packs in a refrigerator (0°C to 10°C **or** 32°F to 50°F) and use promptly. Please note expiry date on packs prior to opening. **When added to water or a water solution, Mango Madness Dehydrated Yeast releases CO_2, especially on substrates high in sugars or starch. Ensure adequate ventilation to keep levels below advised exposure limits.** ***Please request a Material Safety Data Sheet/MSDS for further advice.***

Manufacturing Chart



Beer Styles

Brown Ales, Imperial Stouts, NEIPAs, Pale Ales, Stouts, West Coast IPAs

If you have any questions or concerns about our product please contact us at lab@whclab.com

Prepared by:
The Quality Department at WHC Lab