



## **Technical Data Sheet**

Einstein-Dehydrated (500g)

## **Product Description**

Einstein Dehydrated Yeast is developed by WHC Lab.

Einstein Dehydrated 500g packs contain the yeast species Saccharomyces pastorianus. It is a dried version of a German Lager yeast that has it characterized by a clean profile, low ester formation during fermentation, and medium sulphur production. A good bottom-fermenting yeast strain for cold fermentation A great choice for all lager styles.

## Guidlines

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 100g per hl of wort for a standard gravity brew (1.045). The pitch rate is between 100-150g/hl of wort.

## The intended fermentation temperature range is 9°C to 16°C.

The intended fermentation ten	iperature range is	9 C 10 10 C.							
Ingredient Declaration									
Yeast	98.8% to 99.2%	98.8% to 99.2%							
Emulsifier E491*	0.8% to 1.2% (*Sorbitan Monostearate)								
Technical Specification									
Yeast Strain	Saccharomyces pastorianus								
Fermentation Temperature	9°C to 16°C								
ABV Tolerance	12%								
Nitrogen Demand	Low								
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 x 10 <sup>10</sup>	>1010						
Direct Live Cell Count	Cells/g	1.9 x 10 <sup>10</sup>	> 1.9 x 10 <sup>10</sup>						
Lactic Acid Bacteria	Cfu/g	< 10	< 10 <sup>3</sup>						
Acetic Acid Bacteria	Cfu/g	< 10	< 104						
Wild Yeasts	Cfu/g	< 10	< 10 <sup>5</sup>						
Moulds	Cfu/g	< 10	< 10 <sup>2</sup>						
Coliforms	Cfu/g	< 10	< 10 <sup>2</sup>						
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								

Packaging									
Einstein Dehydrated Y This material complies (materials intended for contact with food)), EU and FDA CFR 21 (174-17	s with relev r contact w J Regulatio '9) (USA).	vant food-o vith food),	contact legis EU Regulatio	lation, incl on 1245/20	uding, EU R 20 (plastic r	egulation 1 naterials ir	itended for		
Storage and Handling		1							
Storage Conditions:		Store at cool to ambient temperatures (ideally 5°C to 15°C), 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:		<ul> <li>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) and use promptly.</li> <li>Please note expiry date on packs prior to opening.</li> <li>Note: When added to water or a water solution, Einstein Dehydrated Yeast releases CO<sub>2</sub>, especially on substrates high in sugars or starch. Ensure adequate ventilation to keep levels below advised exposure limits.</li> <li>Please refer to the Material Safety Data Sheet/MSDS for further</li> </ul>							
		advice.		5.5		/ 5	5		
Laboratory Culture Stages	Air	eparator Filter eparator Cream Yeast	Large Scale Fermenter	Nutrient + Mineral Salts Clarification	ed Bed				
Dark fruit   Clean	Tropical Fruit	Banana	Green Apple	Citrus	Candy	Grassy	Bubblegum		
	*	1	Č						
LOW HIGH	LOW	LOW	LOW	LOW	LOW	LOW	LOW		
Beer Styles	Beer Styles								
German Lagers									

Allergens\*

Dackaging

GMO

Einstein Dehydrated Yeast contains no added allergens. \*EU Regulation 1169/2011 (Food Information Regulations) (Annex II)

Einstein Dehydrated Yeast does not contain genetically modified organisms or materials.