



Technical Data Sheet
Voss (Ragnar)-Dehydrated Yeast (500g)

Product Description			
Voss (Ragnar) Dehydrated Yeast is developed by WHC Lab.			
Voss Dehydrated 500g packs contain the yeast species <i>Saccharomyces cerevisiae</i> . This yeast is isolated from a farmhouse culture from the Voss region in Norway. Extremely thermotolerant, push this yeast as high as 40 degrees Celsius to increase the ester profile. Produces orange and citrus esters. Perfect for high gravity brewing as it also has a very high ABV tolerance.			
Guidlines			
Oxygenation and/or rehydration may not be needed for generation 0 but may be beneficial. It should be noted that Voss (Ragnar) Dehydrated Yeast may be needed to be pitched at a higher temperature range than other brewery yeast. It is recommended that the temperature of the wort exceeds 30°C but no greater than 40°C. It should also be noted that Voss may require a low pitching rate with other yeast products. The pitch rate is between 30-100g/hl of wort. It is recommended to have a pitch rate of at least 30g per hl of wort for a standard gravity brew (1.045). The intended fermentation temperature range is 30°C to 40°C.			
Ingredient Declaration			
Yeast	98.8% to 99.2%		
Emulsifier E491*	0.8% to 1.2% (*Sorbitan Monostearate)		
Technical Specification			
Yeast Strain	<i>Saccharomyces cerevisiae</i>		
Fermentation Temperature	30°C to 40°C		
ABV Tolerance	14%		
Nitrogen Demand	Very High		
Attenuation	76% to 80%		
Flocculation	Medium		
Weight	0.5 kg		
Physical, Chemical and Microbiological properties			
Parameter	Unit of Measure	Value	Specification Value
Appearance	-	Fine granules <i>(typically 3mm particle size)</i>	-
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 ¹⁰	>10 ¹⁰
Direct Live Cell Count	Cells/g	1.9 x 10 ¹⁰	> 1.9 x 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
<i>Escherichia coli</i>	Cfu/g	Absent in 1 g	Absent in 1 g
<i>Staphylococcus aureus</i>	Cfu/g	Absent in 1 g	Absent in 1 g
<i>Salmonella spp</i>	Cfu/g	Absent in 25 g	Absent in 25 g
<i>Listeria monocytogenes</i>	Cfu/g	Absent in 25 g	Absent in 25 g

Allergens*

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

GMO

Voss (Ragnar) Dehydrated Yeast does not contain genetically modified organisms or materials.

Packaging

Voss (Ragnar) 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), 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) and use promptly. Please note expiry date on packs prior to opening. Note: When added to water or a water solution, Voss (Ragnar) Dehydrated Yeast releases CO ₂ , especially on substrates high in sugars or starch. Ensure adequate ventilation to keep levels below advised exposure limits. Please refer to the Material Safety Data Sheet/MSDS for further advice.

Manufacturing Chart

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graph LR; Lab[Laboratory Culture Stages] --> Seed[Seed Yeast]; Air[Air] --> Filter[Filter]; Seed --> Separator1[Separator]; Filter --> Aerator[Aerator]; Separator1 --> Fermenter[Large Scale Fermenter]; Fermenter --> Separator2[Separator]; Separator2 --> Wash[Washing Tank]; Wash --> Separator3[Separator]; Separator3 --> Cream[Cream Yeast]; Cream --> Filter2[Rotary Vacuum Filter]; Fermenter --> Clarification[Clarification]; Clarification --> Beet[Beet Molasses]; Clarification --> Cane[Cane Molasses]; Filter2 --> Dryer[Fluidized Bed Dryer]; Dryer --> Pack[Packaging];
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Flavour Chart

Dark fruit	Clean	Tropical Fruit	Banana	Green Apple	Citrus	Candy	Grassy	Bubblegum
MEDIUM	LOW	HIGH	MEDIUM	HIGH	HIGH	MEDIUM	MEDIUM	LOW

Beer Styles

Amber Ale, Brown Ales, Double IPAs, Imperial Stouts, IPAs, NEIPAs, Pale Ales, Porters, Red Ales, Stouts, West Coast IPAs