



DAKOTA VIENNA / MUNICH

Parameter	Value	Unit
Moisture	3.4	%
Friability	87.2	%
Extract FGDB	83.1	%
Extract CGDB	81.4	%
F-C Difference	1.5	%
Color	6.2	SRM
Beta Glucan	295.6	Mg/L
Soluble Protein	5.0	%
Total Protein	11.3	%
S/T	44.3	%
FAN	165.8	Mg/L
DP	90.1	L
Alpha Amylase	87.5	D.U.
Filtration	normal	Time
Clarity	Clear	
pH	5.8	

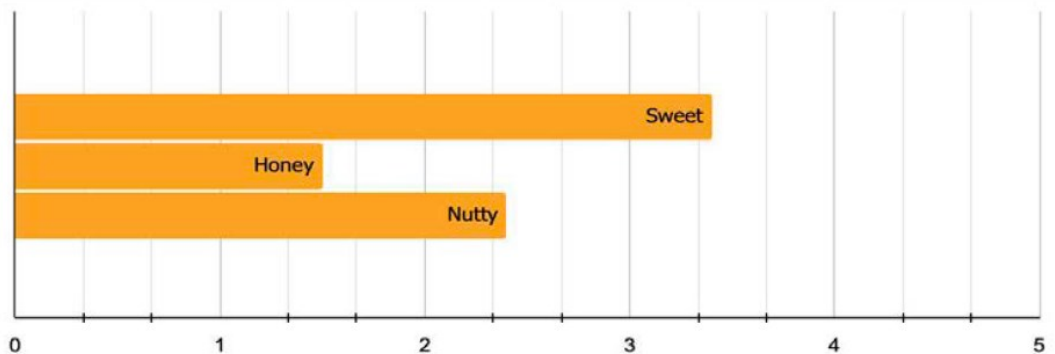


GRAIN HISTORY

This malt was made from Buzz two-row barley that was delivered by Arrow K Farms. Arrow K Farms is located in Belfield, ND just a few miles east of Theodore Roosevelt National Park in western ND.

Two Track Malting uses grain grown without irrigation by growers practicing regenerative agriculture. This results in the highest quality grain grown with the least environmental impact.

MALT SENSORY PROFILE



Hot Steep Method

Items Needed to perform the Hot Steep Method:

- 24-ounce Thermos
- Funnel
- Cone Coffee Filter
- Coffee Grinder
- Scale capable of weighing 50.0 g (± 0.1 g)
- Glass Beaker, tall, 600 mL volume
- Thermometer, standard, 0-200°C
- Quart sized large or small mouth canning jars
- Heating apparatus, capable of heating water to 65°C

Steps to perform the Hot Steep Method:

- Grind 50.0g of malt in coffee grinder (grind of 10-15 sec)
- Add 400ml of 65°C (149°F) water to Thermos
- Add grist to water, cap thermos and shake for 20 sec
- Let rest for 15min
- When timer is up, swirl for a few seconds then pour everything into filter in funnel over large jar
- Collect 100ml of wort and add it back into filter
- Collect and Taste

Check Your Malt Grind

Take 100g of milled grist and Place in #14 Sieve stacked over #30,#60 over pan, Slide 18" on smooth surface for 3 min and Tap sharply on surface ever minute Record Grist retained above in each sieve **Chart to the below gives Percentage of what should be retained in each sieve for each grind**

100g Sample	#14 Sieve	#30 Sieve	#60 Sieve	Pan
Coarse Grind	78g	14g	4g	4g
Medium Grind	53g	28g	11g	8g
Fine Grind	25g	25g	30g	20g

Calculating PPG and OG

PPG (SG of 1 lb of fermentable in 1 gal of water)

$$PPG=46.214*(DBCg/100-MC\%/100-0.002)$$

Original Gravity Calculation

$$OG=1+(EF\%/100)*(PPG*MW/BV)$$

MW = pounds of malt used
 BV = Batch volume in gallons
 EF% = Mashing efficiency
 OG = Original Gravity
 PPG = Pounds Per Gallon
 MC = Moisture Content
 DBCG = Course Grind Extract