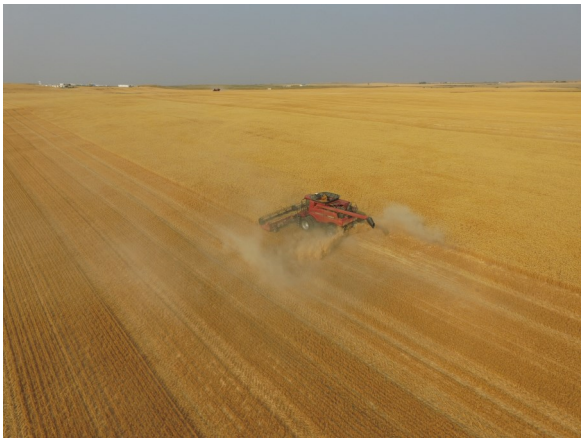
ASTRO WHITE WHEAT

Parameter	Value	Unit
Moisture	6.19	%
Friability	N/A	%
Extract FGDB	80.4	%
Extract CGDB	79.1	%
F-C Difference	1.3	%
Color	2.8	SRM
Soluble Protein	5.98	%
Total Protein	14.7	%
S/T	40.7	%
FAN	145	Mg/L
DP	117	L
Alpha Amylase	28	D.U.
Filtration	normal	Time
Clarity	hazy	
pH	6.12	

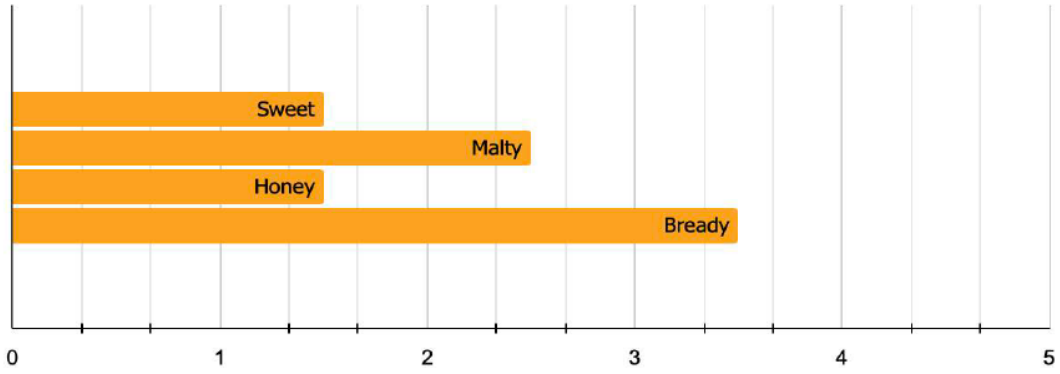


GRAIN HISTORY

Astro White Wheat malt is made from a hard white spring wheat developed for malting 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 is the exclusive maltster of Astro White Wheat so this is truly a one of a kind wheat malt.

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:

1. Grind 50.0g of malt in coffee grinder (grind of 10-15 sec)
2. Add 400ml of 65°C (149°F) water to Thermos
3. Add grist to water, cap thermos and shake for 20 sec
4. Let rest for 15min
5. When timer is up, swirl for a few seconds then poor everything into filter in funnel over large jar
6. Collect 100ml of wort and add it back into filter
7. 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