

# Robot's Brew

Hazy IPA (21 C)

**Type:** All Grain  
**Batch Size:** 12.00 gal  
**Boil Size:** 14.92 gal  
**Boil Time:** 60 min  
**End of Boil Vol:** 13.02 gal  
**Final Bottling Vol:** 10.00 gal  
**Fermentation:** Ale, Two Stage

**Date:** 05 Mar 2023  
**Brewer:** George Handlin  
**Asst Brewer:**  
**Equipment:** Electric Brewery  
**Efficiency:** 85.00 %  
**Est Mash Efficiency:** 88.5 %  
**Taste Rating:** 30.0



## Taste Notes:

## Ingredients

Amt	Name	Type	#	%/IBU	Volume
20.00 gal	Reverse Osmosis	Water	1	-	-
12.12 g	Gypsum (Calcium Sulfate) (Mash)	Water Agent	2	-	-
4.66 g	Epsom Salt (MgSO4) (Mash)	Water Agent	3	-	-
1.77 g	Calcium Chloride (Mash)	Water Agent	4	-	-
1.13 g	Salt (Mash)	Water Agent	5	-	-
20 lbs	Brewers Malt 2-Row (Briess) (2.1 SRM)	Grain	6	76.9 %	1.56 gal
2 lbs	Wheat Malt, Pale (Weyermann) (2.0 SRM)	Grain	7	7.7 %	0.16 gal
1 lbs	Munich Malt (9.0 SRM)	Grain	8	3.8 %	0.08 gal
1 lbs	Oats, Malted (1.0 SRM)	Grain	9	3.8 %	0.08 gal
15.19 g	Gypsum (Calcium Sulfate) (Sparge)	Water Agent	10	-	-
5.85 g	Epsom Salt (MgSO4) (Sparge)	Water Agent	11	-	-
2.22 g	Calcium Chloride (Sparge)	Water Agent	12	-	-
1.41 g	Salt (Sparge)	Water Agent	13	-	-
2.00 oz	Amarillo [8.00 %] - First Wort 60.0 min	Hop	14	24.5 IBUs	-
2 lbs	Dextrose (Briess) [Boil] (1.0 SRM)	Sugar	15	7.7 %	0.15 gal
1.00 oz	Cluster [9.00 %] - Boil 60.0 min	Hop	16	12.5 IBUs	-
1.00 oz	Cascade [8.10 %] - Boil 30.0 min	Hop	17	8.7 IBUs	-
1.00 oz	Cluster [9.00 %] - Boil 30.0 min	Hop	18	9.6 IBUs	-
1.00 oz	Cascade [8.10 %] - Boil 15.0 min	Hop	19	5.6 IBUs	-
2.30 oz	Amarillo [8.00 %] - Boil 0.0 min	Hop	20	0.0 IBUs	-
2.0 pkg	Safale American (DCL/Fermentis #US-05)...	Yeast	21	-	-

## Gravity, Alcohol Content and Color

**Est Original Gravity:** 1.071 SG  
**Est Final Gravity:** 1.012 SG  
**Estimated Alcohol by Vol:** 7.9 %  
**Bitterness:** 60.9 IBUs  
**Est Color:** 4.3 SRM

**Measured Original Gravity:** 1.070 SG  
**Measured Final Gravity:** 1.010 SG  
**Actual Alcohol by Vol:** 8.0 %  
**Calories:** 235.0 kcal/12oz

## Mash Profile

**Mash Name:** RIMS-HERMS Single Infusion, Medium Body  
**Sparge Water:** 10.30 gal  
**Sparge Temperature:** 170.0 F  
**Adjust Temp for Equipment:** FALSE  
**Est Mash PH:** 5.58  
**Measured Mash PH:** 5.20

**Total Grain Weight:** 26 lbs  
**Grain Temperature:** 66.0 F  
**Tun Temperature:** 66.0 F  
**Target Mash PH:** 5.20  
**Mash Acid Addition:** None  
**Sparge Acid Addition:** None

### Mash Steps

Name	Description	Step Temperature	Step Time
Mash In	Add 8.22 gal of water at 163.4 F	152.0 F	60 min

**Sparge:** Fly sparge with 10.30 gal water at 170.0 F

**Mash Notes:** Simple single infusion mash for use with most modern well modified grains (about 95% of the time). Uses heated infusion for mash-in and direct heat on RIMS/HERMS system for mash out.

### Carbonation and Storage

**Carbonation Type:** Keg  
**Pressure/Weight:** 7.72 PSI  
**Keg/Bottling Temperature:** 35.0 F  
**Fermentation:** Ale, Two Stage  
**Fermenter:**

**Storage Temperature:** 65.0 F

**Volumes of CO2:** 2.3  
**Carbonation Est:** Keg with 7.72 PSI  
**Carbonation (from Meas Vol):** Keg with 7.72 PSI  
**Age for:** 30.00 days

### Notes

Created with [BeerSmith](#)