

# chritmas crusher

Winter Seasonal Beer (30 C)

**Type:** All Grain  
**Batch Size:** 5.00 gal  
**Boil Size:** 6.53 gal  
**Boil Time:** 60 min  
**End of Boil Vol:** 5.99 gal  
**Final Bottling Vol:** 4.60 gal  
**Fermentation:** Ale, Two Stage

**Date:** 29 Sep 2020  
**Brewer:**  
**Asst Brewer:**  
**Equipment:** All Grain - Standard 5 Gal/19l Batch - Cooler  
**Efficiency:** 72.00 %  
**Est Mash Efficiency:** 82.8 %  
**Taste Rating:** 30.0



## Taste Notes:

## Ingredients

Amt	Name	Type	#	%/IBU	Volume
10 lbs	Pale Malt, Maris Otter (3.0 SRM)	Grain	1	74.1 %	0.78 gal
1 lbs	Caramel Malt - 60L (Briess) (60.0 SRM)	Grain	2	7.4 %	0.08 gal
8.0 oz	Chocolate Malt (350.0 SRM)	Grain	3	3.7 %	0.04 gal
8.0 oz	Honey Malt (Gambrinus) (25.0 SRM)	Grain	4	3.7 %	0.04 gal
8.0 oz	Victory Malt (biscuit) (Briess) (28.0 SRM)	Grain	5	3.7 %	0.04 gal
1 lbs	Dextrose (Briess) [Boil] (1.0 SRM)	Sugar	6	7.4 %	0.08 gal
1.00 oz	Nugget [13.00 %] - Boil 60.0 min	Hop	7	36.8 IBUs	-
2.00 oz	Orange Peel, Sweet (Boil 5.0 mins)	Spice	8	-	-
8.00 oz	Cacao Nibs (Secondary 7.0 days)	Flavor	9	-	-

## Gravity, Alcohol Content and Color

**Est Original Gravity:** 1.076 SG  
**Est Final Gravity:** 1.013 SG  
**Estimated Alcohol by Vol:** 8.4 %  
**Bitterness:** 36.8 IBUs  
**Est Color:** 22.1 SRM

**Measured Original Gravity:** 1.046 SG  
**Measured Final Gravity:** 1.010 SG  
**Actual Alcohol by Vol:** 4.7 %  
**Calories:** 151.6 kcal/12oz

## Mash Profile

**Mash Name:** Single Infusion, Light Body, No Mash Out  
**Sparge Water:** 4.37 gal  
**Sparge Temperature:** 168.0 F  
**Adjust Temp for Equipment:** TRUE  
**Est Mash PH:** 5.50  
**Measured Mash PH:** 5.20

**Total Grain Weight:** 13 lbs 8.0 oz  
**Grain Temperature:** 72.0 F  
**Tun Temperature:** 72.0 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 3.91 gal of water at 164.2 F	150.0 F	75 min

**Sparge:** Fly sparge with 4.37 gal water at 168.0 F

**Mash Notes:** Simple single infusion mash for use with most modern well modified grains (about 95% of the time).

## Carbonation and Storage

**Carbonation Type:** Bottle  
**Pressure/Weight:** 3.61 oz  
**Keg/Bottling Temperature:** 70.0 F  
**Fermentation:** Ale, Two Stage  
**Fermenter:**

**Volumes of CO2:** 2.3  
**Carbonation Est:** Bottle with 3.61 oz Corn Sugar  
**Carbonation (from Meas Vol):** Bottle with 3.93 oz Corn Sugar  
**Age for:** 30.00 days  
**Storage Temperature:** 65.0 F

## Notes