

## Great Lakes Brewing Co - Christmas Ale (clone) - 9.1%

### Winter Seasonal Beer

Author: Joe Cole

Type: All Grain

IBU : 35 (Tinseth)  
 BU/GU : 0.39  
 Colour : 27 EBC  
 Carbonation : 2.4 CO2-vol

Pre-Boil Gravity : 1.057  
 Original Gravity : 1.088  
 Final Gravity : 1.019

### Fermentables (2.14 kg)

1.53 kg - Pale Malt, 2-Row 3.5 EBC (71.6%)  
 159 g - Caramel Malt 79 EBC (7.4%)  
 159 g - Wheat White Malt 4.5 EBC (7.4%)  
 121 g - Flameout - Dextrose 2 EBC (5.7%)  
 121 g - Flameout - Honey 2 EBC (5.7%)  
 40 g - Special Roast 98.5 EBC (1.9%)  
 8 g - Roasted Barley 1300 EBC (0.4%)

### Hops (20.6 g)

60 min - 13 g - Cascade - 5.5% (30 IBU)  
 ^ Cascade as required to 32 total IBUs with 1...  
 10 min - 7.6 g - Hallertau - 4.5% (5 IBU)

### Miscellaneous

Mash - 1.4 g - Baking Soda (NaHCO3)  
 ^ Lot # 41190621/3  
 ^ Brouwstore (NL) 003.106.2  
 Mash - 9.1 ml - Calcium Chloride (CaCl2) 33 %...  
 ^ Lot # 115038  
 ^ Brouwstore (NL) 055.035.0  
 Mash - 1.3 g - Canning Salt (NaCl)  
 ^ Albert Heijn (NL)  
 Mash - 1.8 g - Epsom Salt (MgSO4)  
 ^ Lot # /2119000091  
 ^ Brouwstore (NL) 055.027.7  
 Mash - 1.5 ml - Lactic Acid 80% 88%  
 ^ Lot # 20200213  
 ^ Brouwstore (NL) 003.002.3  
 15 min - Boil - 1 items - Cinnamon Stick  
 ^ Add in bag with Ginger @15 minutes. Let sit...  
 15 min - Boil - 7.5 g - Ginger Root  
 ^ Peeled then sliced thinly. I previously tri...

### Yeast

0.9 pkg - Neales Brewing Supplies Classic Eng...  
 ^ Lot # 03012001180611V  
 ^ The Malt Miller (UK) YEA-02-021

### 01 Brouwpunt 5L (60min) (rev 4)

Batch Size : 5.6 L  
 Boil Size : 7.76 L  
 Post-Boil Vol : 5.96 L

Mash Water : 5.69 L  
 Sparge Water : 4.01 L  
 Boil Time : 60 min  
 Total Water : 9.7 L



27 EBC

Brewhouse Efficiency: 71.8%  
 Mash Efficiency: 73.3%

### Mash Profile

More dextrinous  
 75.4 °C - Strike Temp  
 68.9 °C - 60 min - Temperature

### Fermentation Profile

Ale  
 20 °C - 14 days - Primary

### Water Profile

Distilled Water (Christmas Ale)  
 Ca 30 Mg 5 Na 25 Cl 75 SO 19

SO/Cl ratio: 0.3  
 Mash pH: 5.4  
 Sparge pH: 6

### Measurements

Mash pH:  
 Boil Volume:  
 Pre-Boil Gravity:  
 Post-Boil Kettle Volume:  
 Original Gravity:  
 Fermenter Top-Up:  
 Fermenter Volume:  
 Final Gravity:  
 Bottling Volume:

### Recipe Notes

Target 35 IBUs with 1oz Hallertau @10min, then Cascade as required @ 60min for 35 IBUs total  
 The ginger I typically peel, then slice thin instead of grating. It's less messy and I find I can control how much of the ginger flavor is present better that way.  
 The cinnamon and ginger are added in a muslin bag @ 15min then left until transfer to ferment is complete. If you test before conditioning is complete, you might find the cinnamon overpowering but it

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## Recipe Notes

mellows out nicely!

Ignore the water additions unless you're building from RO water. I do that so my recipes are the same no matter where I live and without needing to test my water.