

2015/12/01 - Bitter Winter 3

Name	Bitter Winter 3			
Style	Extra Special/Strong Bitter		Brew Date	2015-12-01
Type	All Grain		Boil Size	13.8 gal
IBU's	30.2		Batch Size	12.0 gal
Color	9.1 SRM		Boil Time	60 min
	Estimated		Actual	
Pre-Boil OG	1.048			
OG	1.053		1.053	
FG	1.013		1.000	
ABV	5.2%		5.2%	
Efficiency	85.0%			
Grain	17.9 lbs	Pale Malt, Maris Otter - 2014 Fall		86.0%
	1.5 lbs	Weyermann Caramunich II - 2011 fall (1/2 sac) - 2014 spring (1/4 sac)		7.2%
	0.9 lbs	Caramel/Crystal Malt - 20L		4.4%
	0.5 lbs	Carafoam		2.4%
Mash	60 mins	152 F	Sacch' Rest	
	10 mins	170 F	Mash out	
Hops	60 mins	3.5 oz	Willamette (5.5%)	28.3 IBU
	15 mins	0.5 oz	Willamette (5.5%)	2.0 IBU
	0 mins	1.5 oz	Willamette (5.5%)	-
Additions	15 min	1.0	Whirfloc Tablet	
Yeast	3.0	Safale US-05		
Fermentation	Primary	14 days	68.0 F	
	Cold Crash	2 days	37.0 F	
	Bottle/Keg	1 days	37.0 F	

Carbonation	Bottle Carbonation	29.2 psi	68.0 F
Notes	Changed this up a bit. Different ingredients. Carafoam and crystal 20 from 2012 Pre boil Sg: 1048 Post boil Sg: 1054 Post boil sg2(fermentor): 1052 Next time, less Crystal and more bittering.		