

# 2017/09/11 - Bitter Winter 6

|                 |                             |                                                                                                                           |                            |          |
|-----------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------|----------------------------|----------|
| Name            | Bitter Winter 6             |                                                                                                                           |                            |          |
| Style           | Extra Special/Strong Bitter | Brew Date                                                                                                                 | 2017-09-11                 |          |
| Type            | All Grain                   | Boil Size                                                                                                                 | 13.8 gal                   |          |
| IBU's           | 32.7                        | Batch Size                                                                                                                | 12 gal                     |          |
| Color           | 10.8 SRM                    | Boil Time                                                                                                                 | 60 min                     |          |
|                 |                             |                                                                                                                           |                            |          |
|                 | Estimated                   | Actual                                                                                                                    |                            |          |
| Pre-Boil OG     | 1.048                       |                                                                                                                           |                            |          |
| OG              | 1.053                       |                                                                                                                           |                            |          |
| FG              | 1.013                       |                                                                                                                           |                            |          |
| ABV             | 5.2%                        |                                                                                                                           |                            |          |
| Efficiency      | 80%                         |                                                                                                                           |                            |          |
|                 |                             |                                                                                                                           |                            |          |
| Grain           | 19 lbs                      | Maris Otter Pale Malt <ul style="list-style-type: none"><li>2014 Fall</li></ul>                                           | 86.4%                      |          |
|                 | 2.5 lbs                     | Weyermann Caramunich II <ul style="list-style-type: none"><li>2011 fall (1/2 sac)</li><li>2014 spring (1/4 sac)</li></ul> | 11.4%                      |          |
|                 | 0.5 lbs                     | Carafoam                                                                                                                  | 2.3%                       |          |
|                 |                             |                                                                                                                           |                            |          |
| Water Treatment |                             | HTL (15 gal)                                                                                                              | MT (8 gal)                 |          |
|                 | Campden Tablets             | 1                                                                                                                         | 1/2                        |          |
|                 | Gypsum                      | 1.5 g                                                                                                                     | 0.8 g                      |          |
|                 | Calc Chloride               | 9.6 g                                                                                                                     | 5.1 g                      |          |
|                 | Epson Salt                  | 6.2 g                                                                                                                     | 3.3 g                      |          |
|                 | Baking Soda                 | 0.8 g                                                                                                                     | 0.4 g                      |          |
|                 |                             |                                                                                                                           |                            |          |
| Mash            | 60 mins                     | 152 F                                                                                                                     | Sacch' Rest                |          |
|                 | 10 mins                     | 170 F                                                                                                                     | Mash Out                   |          |
|                 |                             |                                                                                                                           |                            |          |
| Hops            | 60 mins                     | 3.0 oz                                                                                                                    | Goldings, East Kent (5.6%) | 24.8 IBU |
|                 | 15 mins                     | 1.5 oz                                                                                                                    | Goldings, East Kent (5.6%) | 6.1 IBU  |
|                 | 5 mins                      | 1.5 oz                                                                                                                    | Willamette (4.5%)          | 2.0 IBU  |
|                 |                             |                                                                                                                           |                            |          |
| Additions       | 15 mins                     | 1                                                                                                                         | Whirlfloc Tablet           |          |
|                 | 15 mins                     | 1                                                                                                                         | Immersion Chiller          |          |
|                 |                             |                                                                                                                           |                            |          |
| Yeast           | 4 sachets                   | Safale S-04                                                                                                               |                            |          |
|                 |                             |                                                                                                                           |                            |          |
| Fermentation    | Primary                     | 14 days                                                                                                                   | 68 F                       |          |
|                 | Cold Crash                  | 2 days                                                                                                                    | 37 F                       |          |
|                 |                             |                                                                                                                           |                            |          |

|              |                        |
|--------------|------------------------|
| <b>Notes</b> | Changed this up a bit. |
|              | Tastes great!          |