

# Three House Julius new version

Created Sunday October 11th 2020



Brewer #3372

Method: **All Grain** Style: **American Pale Ale** Boil Time: **60 min** Batch Size: **27 liters** (fermentor volume) Pre Boil Size: **33.35 liters** Post Boil Size: **27.45 liters**

Pre Boil Gravity: **1.078** (recipe based estimate) Post Boil Gravity: **1.095** (recipe based estimate) Efficiency: **82%** (brew house) Calories: **294 calories** (Per 330ml)

Carbs: **28.2 g** (Per 330ml)

Original Gravity: **1.095** Final Gravity: **1.021** ABV (standard): **9.6%** IBU (rager): **62.5** SRM (morey): **10.1**  Mash pH: **5.6** Cost \$ **n/a**

## Fermentables

| Amount  | Fermentable                       | Cost | PPG  | °L   | Bill % |
|---------|-----------------------------------|------|------|------|--------|
| 7.50 kg | United Kingdom - Maris Otter Pale |      | 38   | 3.75 | 74.6%  |
| 0.75 kg | Flaked Oats                       |      | 33   | 2.2  | 7.5%   |
| 0.75 kg | Bestmalz - BEST Wheat Malt        |      | 37.7 | 2.2  | 7.5%   |
| 0.30 kg | Weyermann - Carapils              |      | 34.5 | 2.1  | 3%     |
| 0.75 kg | Bestmalz - BEST Melanoidin        |      | 34.5 | 27   | 7.5%   |

**10.05 kg / \$ 0.00**

## Hops

| Amount | Variety  | Cost | Type       | AA   | Use                             | Time   | IBU   | Bill % |
|--------|----------|------|------------|------|---------------------------------|--------|-------|--------|
| 20 g   | Magnum   |      | Leaf/Whole | 15   | First Wort at 81 °C             | 60 min | 33.04 | 5.9%   |
| 10 g   | Amarillo |      | Pellet     | 8.6  | Boil                            | 60 min | 8.61  | 2.9%   |
| 10 g   | Citra    |      | Pellet     | 11   | Boil                            | 60 min | 11.01 | 2.9%   |
| 30 g   | Citra    |      | Pellet     | 11   | Dry Hop (High Krausen) at 21 °C | 6 days |       | 8.8%   |
| 30 g   | Simcoe   |      | Pellet     | 12.7 | Dry Hop (High Krausen)          | 6 days |       | 8.8%   |
| 30 g   | Mosaic   |      | Pellet     | 12.5 | Dry Hop (High Krausen) at 21 °C | 6 days |       | 8.8%   |
| 30 g   | Citra    |      | Pellet     | 11   | Hop Stand at 80 °C              | 0 min  | 3     | 8.8%   |
| 30 g   | Simcoe   |      | Pellet     | 12.7 | Hop Stand at 80 °C              | 0 min  | 3.47  | 8.8%   |
| 30 g   | Mosaic   |      | Leaf/Whole | 12.5 | Hop Stand at 80 °C              | 0 min  | 3.41  | 8.8%   |
| 40 g   | Simcoe   |      | Leaf/Whole | 12.7 | Dry Hop at 2 °C                 | 3 days |       | 11.8%  |
| 40 g   | Mosaic   |      | Leaf/Whole | 12.5 | Dry Hop at 2 °C                 | 3 days |       | 11.8%  |

**340 g / \$ 0.00**

| Amount   | Variety        | Cost   | Type                           | AA                 | Use             | Time                     | IBU | Bill %                            |                                   |
|--|----------------|--|--------------------------------|--------------------|-----------------|--------------------------|-----|-----------------------------------|-----------------------------------|
| 40 g   | El Dorado      |  | Leaf/Whole                     | 15.7               | Dry Hop at 2 °C | 3 days                   |     | 11.8%                             |                                   |
| 340 g / \$ 0.00  |                |  |                                |                    |                 |                          |     |                                   |                                   |
| Yeast  |                |  |                                |                    |                 |                          |     |                                   |                                   |
| Fermentis - Safale - English Ale Yeast S-04                |                |  |                                |                    |                 |                          |     |                                   |                                   |
| Amount: 33 Grams   | Cost:          | Attenuation (avg): 75%                                     |                                | Flocculation: High |                 | Optimum Temp: 12 - 25 °C |     | Starter: Yes                      |                                   |
| Fermentation Temp: 22 °C                                   |                | Pitch Rate: 0.75 (M cells / ml / ° P) 459 B cells required |                                |                    |                 |                          |     |                                   |                                   |
| Priming  |                |  |                                |                    |                 |                          |     |                                   |                                   |
| Method: BrownSugar   | Amount: 25.5 g | Temp: 20 °C  | CO <sub>2</sub> Level: 2.1 g/l |                    |                 |                          |     |                                   |                                   |
| Target Water Profile NEIPA                                 |                |  |                                |                    |                 |                          |     |                                   |                                   |
| Ca <sup>+2</sup> 96  |                | Mg <sup>+2</sup> 5   |                                | Na <sup>+</sup> 10 |                 | Cl <sup>-</sup> 198      |     | SO <sub>4</sub> <sup>-2</sup> 117 | HCO <sub>3</sub> <sup>-</sup> 166 |
| Mash Guidelines  |                |  |                                |                    |                 |                          |     |                                   |                                   |
| Amount   | Description    | Type   | Start Temp                     | Target Temp        | Time            |                          |     |                                   |                                   |
| 20 L   |                | Infusion   | 67 °C                          | 65 °C              | 90 min          |                          |     |                                   |                                   |
| 30 L   |                | Sparge   | 80 °C                          | 67 °C              | 30 min          |                          |     |                                   |                                   |
| Starting Mash Thickness: 1.25 L/kg                         |                |  |                                |                    |                 |                          |     |                                   |                                   |
| Starting Grain Temp: 20 °C                                 |                |  |                                |                    |                 |                          |     |                                   |                                   |
| Quick Water Requirements                                   |                |  |                                |                    |                 |                          |     |                                   |                                   |
| Water  |                |  |                                |                    | Liters          |                          |     |                                   |                                   |
| Strike water volume at mash thickness of 1.3 L/kg          |                |  |                                |                    | 12.6            |                          |     |                                   |                                   |
| Mash volume with grains                                    |                |  |                                |                    | 19.2            |                          |     |                                   |                                   |
| Grain absorption losses                                    |                |  |                                |                    | -10.5           |                          |     |                                   |                                   |
| Remaining sparge water volume (equipment estimates 32.2 L) |                |  |                                |                    | 32.2            |                          |     |                                   |                                   |
| Mash Lauter Tun losses                                     |                |  |                                |                    | -0.9            |                          |     |                                   |                                   |
| Pre boil volume (equipment estimates 33.3 L)               |                |  |                                |                    | 33.4            |                          |     |                                   |                                   |
| Boil off losses  |                |  |                                |                    | -5.7            |                          |     |                                   |                                   |
| Hops absorption losses (first wort, boil, aroma)           |                |  |                                |                    | -0.2            |                          |     |                                   |                                   |
| Post boil Volume   |                |  |                                |                    | 27.5            |                          |     |                                   |                                   |
| Hops absorption losses (whirlpool, hop stand)              |                |  |                                |                    | -0.5            |                          |     |                                   |                                   |
| Going into fermentor                                       |                |  |                                |                    | 27              |                          |     |                                   |                                   |
| Total:   |                |  |                                |                    | 44.8            |                          |     |                                   |                                   |

**Water**

**Liters**

Equipment Profile Used:

My Equipment (default)