

ruby

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **19**
- SRM **11**
- Style **Red IPA**

Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **5 %**
- Size with trub loss **29.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **37.3 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.1 liter(s)**
- Total mash volume **24.6 liter(s)**

Steps

- Temp **66 C**, Time **60 min**

Mash step by step

- Heat up **19.1 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **23.7 liter(s)** of **76C** water or to achieve **37.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------------|-----------------------------|----------------|--------------|------------|
| Grain | Simpsons - Maris Otter | 5 kg (91.4%) | 81 % | 6 |
| Grain | Caramel/Crystal Malt - 120L | 0.165 kg (3%) | 72 % | 236 |
| Grain | Briess - Chocolate Malt | 0.165 kg (3%) | 60 % | 690 |
| Grain | Wheat, Torrified | 0.14 kg (2.6%) | 79 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|----------------|-------------|---------------|-------------|-------------------|
| Boil | Amarillo | 40 g | 20 min | 9.5 % |
| Whirlpool | Amarillo | 80 g | 0 min | 9.5 % |
| Dry Hop | Centennial | 100 g | 4 day(s) | 10.5 % |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-------------|---------------|----------------|-------------|
| Fining | protofloc | 5 g | Boil | 15 min |