

Double Hopfest mod

- Gravity **11.5 BLG**
- ABV **4.5 %**
- IBU **48.5**
- SRM **7.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **0 %**
- Size with trub loss **16 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.08 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.2 liter(s)**
- Total mash volume **13.6 liter(s)**

Steps

- Temp **68 C**, Time **45 min**

Mash step by step

- Heat up **10.2 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **45 min** at **68C**
- Sparge using **12.3 liter(s)** of **76C** water or to achieve **19.08 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|--------|---------|-----|
| Grain | Pale Ale | 1.5 kg | 74.84 % | 13 |
| Grain | Pilsner (Weyermann) | 1.5 kg | 82.23 % | 7 |
| Grain | Oats, Flaked | 0.4 kg | 80 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|-----------|------------|
| Boil | Chinook | 30 g | 30 min | 13 % |
| Boil | Cascade | 30 g | 0 min | 5.5 % |
| Dry Hop | Amarillo | 50 g | 10 day(s) | 9.2 % |
| Dry Hop | Citra | 50 g | 0 day(s) | 12 % |
| Dry Hop | Chinook | 25 g | 0 day(s) | 13 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------|------|------|--------|---------------|
| Safale American | Ale | Dry | --- g | DCL/Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|--------------------------|--------|---------|--------|
| Water Agent | Gypsum (Calcium Sulfate) | 1 g | Mash | 60 min |