

Cold APA

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **23**
- SRM **3.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **75 liter(s)**
- Trub loss **1 %**
- Size with trub loss **79.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **87.5 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **51 liter(s)**
- Total mash volume **68 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **51 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **78C**
- Sparge using **53.5 liter(s)** of **76C** water or to achieve **87.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|---------------|--------|-----|
| Grain | Viking Pilsner malt | 13 kg (76.5%) | 82 % | 4 |
| Grain | Rye, Flaked | 3 kg (17.6%) | 78.3 % | 0.7 |
| Grain | Viking Wheat Malt | 1 kg (5.9%) | 83 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------|--------|--------|------------|
| Boil | lunga | 20 g | 60 min | 12.4 % |
| Whirlpool | Cascade | 100 g | 30 min | 6 % |
| Whirlpool | Cascade | 150 g | 20 min | 6 % |