

Cold APA

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **28**
- SRM **3.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **60 liter(s)**
- Trub loss **1 %**
- Size with trub loss **64.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **71.9 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **40.5 liter(s)**
- Total mash volume **54 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **40.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **5 min** at **78C**
- Sparge using **44.9 liter(s)** of **76C** water or to achieve **71.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|----------------|--------|-----|
| Grain | Viking Pilsner malt | 10 kg (74.1%) | 82 % | 4 |
| Grain | Rye, Flaked | 2.5 kg (18.5%) | 78.3 % | 0.7 |
| Grain | Płatki pszeniczne | 1 kg (7.4%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------|--------|--------|------------|
| Boil | Ctz | 50 g | 60 min | 14.4 % |