

APA

- Gravity **11.7 BLG**
- ABV ---
- IBU **39**
- SRM **6.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **12.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **18.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.3 liter(s)**
- Total mash volume **12.4 liter(s)**

Steps

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

Mash step by step

- Heat up **9.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **12.5 liter(s)** of **76C** water or to achieve **18.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|-----------------|-------|-----|
| Grain | Viking Pale Ale malt | 2.75 kg (88.7%) | 80 % | 6 |
| Grain | Pszeniczny | 0.25 kg (8.1%) | 85 % | 4 |
| Grain | Caramel/Crystal Malt - 120L | 0.1 kg (3.2%) | 72 % | 200 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|----------|------------|
| Boil | Citra | 15 g | 60 min | 13.5 % |
| Boil | Citra | 10 g | 5 min | 13.5 % |
| Boil | Cascade | 10 g | 5 min | 6 % |
| Boil | Citra | 30 g | 0 min | 13.5 % |
| Boil | Cascade | 30 g | 0 min | 6 % |
| Dry Hop | Citra | 40 g | 4 day(s) | 13.5 % |
| Dry Hop | Cascade | 40 g | 4 day(s) | 6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11 g | Fermentis |