

# APA

---

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **32**
- SRM **5.8**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **8 %**
- Size with trub loss **16.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13.4 liter(s)**
- Total mash volume **17.2 liter(s)**

## Steps

- Temp **64 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **13.4 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **70 min** at **64C**
- Keep mash **10 min** at **78C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **19.4 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt       | 3 kg (78.3%)   | 80 %  | 5   |
| Grain | Cara-Pils/Dextrine         | 0.23 kg (6%)   | 72 %  | 4   |
| Grain | Weyermann pszeniczny jasny | 0.5 kg (13.1%) | 80 %  | 6   |
| Grain | Fawcett - Crystal          | 0.1 kg (2.6%)  | 70 %  | 160 |

## Hops

| Use for             | Name                   | Amount | Time     | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil                | Chinook                | 7 g    | 30 min   | 11.3 %     |
| Boil                | Citra                  | 7 g    | 20 min   | 13.5 %     |
| Boil                | Chinook                | 10 g   | 15 min   | 11.3 %     |
| Boil                | Cascade                | 10 g   | 10 min   | 7.1 %      |
| Aroma (end of boil) | Cascade                | 8 g    | 5 min    | 7.1 %      |
| Aroma (end of boil) | Mosaic                 | 5 g    | 5 min    | 12 %       |
| Aroma (end of boil) | Chinook                | 3 g    | 5 min    | 11.3 %     |
| Dry Hop             | Mosaic                 | 15 g   | 3 day(s) | 12 %       |
| Dry Hop             | Columbus/Tomahawk/Zeus | 15 g   | 3 day(s) | 12.5 %     |

## Yeasts

| <b>Name</b> | <b>Type</b> | <b>Form</b> | <b>Amount</b> | <b>Laboratory</b> |
|-------------|-------------|-------------|---------------|-------------------|
| Safale S-04 | Ale         | Dry         | 11 g          | Safale            |

### **Extras**

| <b>Type</b> | <b>Name</b>     | <b>Amount</b> | <b>Use for</b> | <b>Time</b> |
|-------------|-----------------|---------------|----------------|-------------|
| Water Agent | Gips piwowarski | 1.5 g         | Mash           | 70 min      |
| Fining      | Mech irlandzki  | 3 g           | Boil           | 10 min      |