

## #1 APA

---

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **27**
- SRM **4.4**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss --- %
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.4 liter(s)**
- Total mash volume **25 liter(s)**

### Steps

- Temp **66 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **0 min**

### Mash step by step

- Heat up **19.4 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **50 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **14 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

| Type  | Name                  | Amount         | Yield | EBC |
|-------|-----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt  | 5 kg (90.1%)   | 80 %  | 5   |
| Grain | Karmelowy Jasny 30EBC | 0.15 kg (2.7%) | 75 %  | 30  |
| Grain | Płatki owsiane        | 0.4 kg (7.2%)  | 85 %  | 3   |

### Hops

| Use for             | Name     | Amount | Time   | Alpha acid |
|---------------------|----------|--------|--------|------------|
| Boil                | Mosaic   | 25 g   | 45 min | 10 %       |
| Boil                | Cascade  | 20 g   | 10 min | 6 %        |
| Aroma (end of boil) | Amarillo | 20 g   | 0 min  | 9.5 %      |
| Aroma (end of boil) | Cascade  | 30 g   | 0 min  | 6 %        |
| Aroma (end of boil) | Mosaic   | 25 g   | 0 min  | 10 %       |

### Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11.5 g | Fermentis  |