

APA 2023

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **41**
- SRM **6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **6 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33 liter(s)**

Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **24.8 liter(s)**

Steps

- Temp **67 C**, Time **90 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **18.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **90 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **20.6 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 4 kg (64.5%) | 80 % | 6.5 |
| Grain | Pszeniczny | 1 kg (16.1%) | 85 % | 4 |
| Grain | Strzegom Karmel 150 | 0.2 kg (3.2%) | 75 % | 150 |
| Grain | Płatki owsiane | 1 kg (16.1%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil | Warrior + Chinook | 30 g | 60 min | 14 % |
| Aroma (end of boil) | Cascade | 25 g | 5 min | 7.2 % |
| Aroma (end of boil) | Mosaic | 25 g | 5 min | 7.2 % |

Yeasts

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