

Double APA

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **95**
- SRM **16.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **20.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **15 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **15 min** at **72C**
- Sparge using **9.2 liter(s)** of **76C** water or to achieve **20.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------------|----------------|-------|-----|
| Grain | Bruntal ekstrakt słodowy Pale Ale | 4.5 kg (81.8%) | 80 % | 35 |
| Grain | Carmel pale - Viking Malt | 0.5 kg (9.1%) | --- % | 10 |
| Grain | Chateau Abbey | 0.5 kg (9.1%) | --- % | 45 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------|--------|----------|------------|
| Boil | Marynka | 30 g | 60 min | 10 % |
| Boil | Citra | 25 g | 30 min | 12 % |
| Boil | El Dorado | 25 g | 30 min | 15 % |
| Boil | Citra | 10 g | 1 min | 12 % |
| Dry Hop | Citra | 20 g | 3 day(s) | 12 % |

Yeasts

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