

## Double APA

---

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **136**
- SRM **4.1**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 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 **65 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **16.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (54.5%)	80 %	5
Grain	Pszeniczny	0.5 kg (9.1%)	85 %	4
Grain	Strzegom Pilzneński	2 kg (36.4%)	80 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	50 g	50 min	10.5 %
Boil	Centennial	50 g	20 min	10.5 %
Boil	Citra	50 g	15 min	12 %
Boil	Citra	50 g	10 min	12 %
Dry Hop	Simcoe	50 g	3 day(s)	13.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
US-04	Ale	Slant	400 ml	---

### Extras

Type	Name	Amount	Use for	Time
Flavor	płatki akacyjne	50 g	Secondary	7 day(s)