

## Double APA

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- 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	---