

## Druga APA

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **40**
- SRM **5**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **29.5 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.45 liter(s) / kg**
- Mash size **24.2 liter(s)**
- Total mash volume **31.2 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **5 min**

### Mash step by step

- Heat up **24.2 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **72C**
- Sparge using **12.3 liter(s)** of **76C** water or to achieve **29.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5.5 kg (78.6%)	80 %	6
Grain	Strzegom Pilzniejszy	1 kg (14.3%)	80 %	4
Grain	Pszeniczny	0.5 kg (7.1%)	85 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	15 g	60 min	9.5 %
Boil	El Dorado	10 g	60 min	15 %
Aroma (end of boil)	Amarillo	15 g	10 min	9.5 %
Aroma (end of boil)	El Dorado	15 g	10 min	15 %
Dry Hop	Amarillo	25 g	7 day(s)	9.5 %
Dry Hop	El Dorado	25 g	7 day(s)	15 %
Dry Hop	Cascade	40 g	7 day(s)	6 %
Boil	Cascade	5 g	60 min	6 %
Boil	Cascade	5 g	10 min	6 %

### Yeasts

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