

APA

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **40**
- SRM **5.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **13.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **19.4 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **22.5 liter(s)**

Steps

- Temp **62 C**, Time **60 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **67.3C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **2 min** at **78C**
- Sparge using **5.9 liter(s)** of **76C** water or to achieve **19.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (44.4%)	80 %	5
Grain	Pszeniczny	0.5 kg (11.1%)	85 %	4
Grain	Strzegom Monachijski typ I	0.5 kg (11.1%)	79 %	16
Grain	płatki jęczmienne	1 kg (22.2%)	60 %	4
Grain	Płatki owsiane	0.5 kg (11.1%)	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	10 %
Whirlpool	Chinook pl	10 g	15 min	7.5 %
Whirlpool	Mosaic	10 g	15 min	10 %
Whirlpool	Citra	10 g	15 min	12 %
Dry Hop	Citra	30 g	6 day(s)	12 %
Dry Hop	Mosaic	30 g	6 day(s)	10 %
Dry Hop	Chinook	30 g	6 day(s)	13 %

Yeasts

Name	Type	Form	Amount	Laboratory
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us-05	Ale	Dry	11 g	fermentis
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Extras

Type	Name	Amount	Use for	Time
Fining	Whirlfloc T	1.25 g	Boil	10 min