

APA

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **53**
- SRM **4.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.5 liter(s)**
- Total mash volume **19.4 liter(s)**

Steps

- Temp **67 C**, Time **90 min**

Mash step by step

- Heat up **14.5 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **90 min** at **67C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (82.5%)	79 %	5
Grain	Karmelowy 50	0.25 kg (5.2%)	75 %	50
Grain	Płatki owsiane	0.6 kg (12.4%)	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	10 g	60 min	13 %
Boil	Amarillo	10 g	30 min	9.5 %
Boil	Simcoe	10 g	30 min	13.2 %
Boil	Citra	10 g	30 min	12 %
Aroma (end of boil)	Amarillo	10 g	5 min	9.5 %
Aroma (end of boil)	Simcoe	10 g	5 min	13.2 %
Aroma (end of boil)	Citra	10 g	5 min	12 %
Dry Hop	Amarillo	30 g	3 day(s)	9.5 %
Dry Hop	Simcoe	30 g	3 day(s)	13.2 %
Dry Hop	Citra	30 g	3 day(s)	12 %

Yeasts

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

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	5 g	Boil	10 min