

APA

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **48**
- SRM **4.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **20.3 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **1 min** at **78C**
- Sparge using **15.2 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	4 kg (88.9%)	85 %	7
Grain	Platki owsiane	0.5 kg (11.1%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	25 g	20 min	12 %
Boil	Chinook	25 g	5 min	13 %
Boil	Citra	25 g	5 min	12 %
Boil	Sorachi Ace	25 g	5 min	10 %
Whirlpool	Chinook	25 g	5 min	13 %
Whirlpool	Citra	25 g	5 min	12 %
Whirlpool	Sorachi Ace	25 g	5 min	10 %
Dry Hop	Citra	100 g	4 day(s)	12 %
Dry Hop	Sorachi Ace	50 g	4 day(s)	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
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FM52 Amerykański Sen	Ale	Liquid	100 ml	Fermentum Mobile
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