

APA

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **62**
- SRM **6.1**
- 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 **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **17.1 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	4.5 kg (78.9%)	85 %	7
Grain	Weyermann - Carared	0.5 kg (8.8%)	75 %	45
Grain	Weyermann - Carapils	0.5 kg (8.8%)	78 %	4
Grain	Weyermann pszeniczny jasny	0.2 kg (3.5%)	80 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	45 g	60 min	13 %
Aroma (end of boil)	Citra	30 g	5 min	12 %
Whirlpool	Cascade	20 g	---	6 %
Dry Hop	Cascade	25 g	4 day(s)	6 %
Dry Hop	Citra	30 g	4 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
Water Agent	Gips	4 g	Mash	---
Fining	Mech Irlandzki	5 g	Boil	15 min