

APA v1

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **37**
- SRM **4.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **31.5 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.4 liter(s)**
- Total mash volume **23.2 liter(s)**

Steps

- Temp **56 C**, Time **5 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **17.4 liter(s)** of strike water to **62C**
- Add grains
- Keep mash **5 min** at **56C**
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **19.9 liter(s)** of **76C** water or to achieve **31.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	1 kg (17.2%)	81 %	4
Grain	Castle Pale Ale	4 kg (69%)	80 %	8
Grain	Płatki pszeniczne	0.5 kg (8.6%)	85 %	3
Grain	Pszeniczny	0.3 kg (5.2%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	6.5 %
Boil	Citra	20 g	20 min	12.5 %
Boil	Citra	20 g	10 min	12.5 %
Boil	Citra	30 g	5 min	12.5 %
Whirlpool	Citra	80 g	0 min	12.5 %

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Yeasts

Name	Type	Form	Amount	Laboratory
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FM52 Amerykański Sen	Ale	Liquid	50 ml	Fermentum Mobile
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Extras

Type	Name	Amount	Use for	Time
Flavor	owoc	50 g	Secondary	7 day(s)