

APA

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **35**
- SRM **4.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **11.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.7 liter(s)**
- Total mash volume **13.7 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **10.7 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **6.9 liter(s)** of **76C** water or to achieve **14.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Bestmalz - Pale Ale	2.2 kg (72.1%)	80.5 %	6
Grain	Bestmalz - Pszeniczny jasny	0.4 kg (13.1%)	82 %	4.5
Grain	Płatki owsiane	0.3 kg (9.8%)	85 %	3
Grain	Acid Malt	0.15 kg (4.9%)	58.7 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	10 g	60 min	14.7 %
Boil	Simcoe	5 g	20 min	13.1 %
Aroma (end of boil)	Simcoe	10 g	0 min	13.1 %
Dry Hop	Mosaic	15 g	3 day(s)	12 %
Dry Hop	Nelson Sauvign	60 g	3 day(s)	11.2 %

Yeasts

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