

APA PL

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **45**
- SRM **7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **32.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **21.8 liter(s)**
- Total mash volume **28.6 liter(s)**

Steps

- Temp **63 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **21.8 liter(s)** of strike water to **69.7C**
- Add grains
- Keep mash **45 min** at **63C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **17.5 liter(s)** of **76C** water or to achieve **32.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3.5 kg (51.5%)	85 %	7
Grain	Monachijski	2.4 kg (35.3%)	80 %	16
Grain	Carabelge	0.5 kg (7.4%)	80 %	30
Grain	Oats, Flaked	0.4 kg (5.9%)	80 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Enigma (AUS)	21 g	60 min	17.2 %
Boil	Citra	15 g	15 min	14.2 %
Boil	Lublin (Lubelski)	15 g	5 min	3.6 %
Dry Hop	Lublin (Lubelski)	35 g	10 day(s)	3.6 %
Dry Hop	Azacca	10 g	10 day(s)	10.4 %
Boil	Chinook	10 g	15 min	12.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis