

APA

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **23**
- SRM **3.9**
- 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 **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **25.2 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **18.9 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **45 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.8 kg (76.2%)	81 %	4
Grain	Pszeniczny	1 kg (15.9%)	85 %	4
Grain	Briess - Carapils Malt	0.5 kg (7.9%)	74 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	15 g	15 min	12.3 %
Boil	Chinook	15 g	15 min	11.7 %
Dry Hop	Citra	20 g	4 day(s)	12 %
Whirlpool	Kohatu	15 g	30 min	5.8 %
Boil	Citra	5 g	60 min	12.9 %