

AIPA

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **68**
- SRM **7.8**
- Style **American IPA**

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 **15 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **19.8 liter(s)** of strike water to **72C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale (Malteurop)	5.3 kg (85.5%)	80 %	8.5
Grain	Pszeniczny	0.35 kg (5.6%)	85 %	4
Grain	Strzegom Karmel 150	0.25 kg (4%)	75 %	150
Grain	Barley, Flaked	0.3 kg (4.8%)	70 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	lunga	10 g	60 min	11 %
First Wort	Cascade	10 g	60 min	6.9 %
First Wort	Amarillo	10 g	60 min	8.5 %
Boil	Cascade	25 g	20 min	6.9 %
Boil	Amarillo	25 g	20 min	8.5 %
Boil	Cascade	25 g	10 min	6.9 %
Boil	Amarillo	25 g	10 min	8.5 %
Whirlpool	Amarillo	20 g	50 min	8.5 %
Whirlpool	Cascade	20 g	50 min	6.9 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	400 ml	Fermentis