

appa

- Gravity **12.2 BLG**
- ABV ---
- IBU **87**
- SRM **4.2**
- Style **English IPA**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **17.7 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **1 min** at **78C**
- Sparge using **19.9 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	4.7 kg (79.7%)	80 %	4
Grain	Pszeniczny	1.2 kg (20.3%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	40 g	60 min	13.5 %
Boil	Sybilla	50 g	15 min	6.5 %
Boil	Summit	30 g	5 min	17 %
Boil	Hallertau	25 g	30 min	4.5 %
Whirlpool	Simcoe	10 g	0 min	13 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	---