

Pipa

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **49**
- SRM **10.4**
- Style **English IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **22.4 liter(s)**

Steps

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

Mash step by step

- Heat up **15.6 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **20.2 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	6 kg (88.2%)	80 %	7
Grain	Biscuit Malt	0.3 kg (4.4%)	79 %	45
Grain	Caramel/Crystal Malt - 40L	0.3 kg (4.4%)	74 %	79
Grain	Caramel/Crystal Malt - 120L	0.2 kg (2.9%)	72 %	236

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Pulawski	60 g	60 min	8 %
Boil	Lublin (Lubelski)	40 g	10 min	4 %
Aroma (end of boil)	Lublin (Lubelski)	40 g	1 min	4 %