

## PIPA #1

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- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **36**
- SRM **4.9**
- Style **English IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **3 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

### Steps

- Temp **64 C**, Time **45 min**
- Temp **70 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **16.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **70C**
- Keep mash **10 min** at **78C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (72.7%)	80 %	7
Grain	Viking Pilsner malt	1.5 kg (27.3%)	82 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %
Aroma (end of boil)	Lublin (Lubelski)	20 g	5 min	4 %
Aroma (end of boil)	Oktawia	20 g	5 min	7.1 %
Dry Hop	Lublin (Lubelski)	30 g	5 day(s)	4 %
Dry Hop	Oktawia	30 g	5 day(s)	7.1 %

### Yeasts

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