

pipa

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **83**
- SRM **5**
- 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 **75 min**
- Evaporation rate **10 %/h**
- Boil size **29.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **19.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **16.7 liter(s)** of **76C** water or to achieve **29.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	4.5 kg (69.2%)	80 %	7
Grain	Strzegom Pilzneński	1.5 kg (23.1%)	80 %	4
Grain	Pszoniczny	0.5 kg (7.7%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	60 min	10 %
Boil	junga	25 g	60 min	16 %
Boil	Sybilla	15 g	60 min	3.5 %
Boil	junga	15 g	20 min	16 %
Boil	Sybilla	20 g	20 min	3.5 %
Boil	Lublin (Lubelski)	5 g	20 min	4 %
Boil	Marynka	5 g	20 min	10 %
Boil	junga	10 g	5 min	16 %
Boil	Marynka	20 g	5 min	10 %
Boil	Lublin (Lubelski)	20 g	5 min	4 %
Boil	Sybilla	15 g	5 min	3.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	15 g	Safale