MFEPE

- Gravity **14.5 BLG**
- ABV **---**
- IBU **63**
- SRM **8.2**
- Style **Imperial IPA**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **73 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **20.8 liter(s)**
- Total mash volume **27.3 liter(s)**

Steps

- Temp **55 C**, Time **20 min**
- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **20.8 liter(s)** of strike water to **60.5C**
- Add grains
- Keep mash **20 min** at **55C**
- Keep mash **40 min** at **66C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	5.5 kg *(84.6%)*	80 %	7
Grain	Pszeniczny	0.5 kg *(7.7%)*	85 %	4
Grain	Melanoiden Malt	0.5 kg *(7.7%)*	80 %	39

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	9.5 %
Boil	Styrian Golding	60 g	60 min	3.6 %
Boil	Styrian Golding	40 g	30 min	5.7 %
Whirlpool	Sybilla	30 g	30 min	4.5 %
Dry Hop	Centennial	30 g	4 day(s)	8.9 %
Dry Hop	Citra	30 g	4 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	10.5 g	Safale

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Extras

Type	Name	Amount	Use for	Time
Flavor	płatki owsiane	400 g	Mash	90 min
Fining	mech irlandzki	5 g	Boil	10 min