

Imperator

- Gravity **20.9 BLG**
- ABV ---
- IBU **112**
- SRM **9**
- Style **Imperial IPA**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **3 %**
- Size with trub loss **11.9 liter(s)**
- Boil time **70 min**
- Evaporation rate **20 %/h**
- Boil size **15.3 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.8 liter(s)**
- Total mash volume **18.4 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **40 min**

Mash step by step

- Heat up **13.8 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **40 min** at **72C**
- Sparge using **6.1 liter(s)** of **76C** water or to achieve **15.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale (Malteurop)	2.8 kg (60.9%)	81 %	7
Grain	Słód Owsiany	1.8 kg (39.1%)	80 %	7

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Equinox	30 g	60 min	13.4 %
Boil	Equinox	25 g	15 min	13.4 %
Boil	Chinook	25 g	15 min	12.3 %
Whirlpool	Equinox	25 g	0 min	13.4 %
Whirlpool	Chinook	25 g	0 min	12.3 %
Dry Hop	Equinox	60 g	3 day(s)	13.4 %
Dry Hop	Chinnok	60 g	5 day(s)	12.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Funktown Pale Ale	Ale	Slant	150 ml	The Yeast Bay