

TeaPA

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **54**
- SRM **7.9**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **23.8 liter(s)**
- Total mash volume **30.6 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **23.8 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **10.5 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (73.5%)	80 %	5
Grain	Rye Malt	0.5 kg (7.4%)	63 %	10
Grain	Karmelowy Jasny 30EBC	1 kg (14.7%)	75 %	50
Grain	Płatki owsiane	0.3 kg (4.4%)	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	20 g	60 min	12 %
Boil	Idaho 7	30 g	30 min	12.7 %
Aroma (end of boil)	Citra	20 g	5 min	12 %
Whirlpool	Idaho 7	20 g	5 min	12.7 %
Whirlpool	Cascade PL	30 g	5 min	5.2 %
Dry Hop	Idaho 7	20 g	12 day(s)	12.7 %
Dry Hop	Citra	20 g	12 day(s)	12 %
Dry Hop	Cascade PL	30 g	12 day(s)	5.2 %
Dry Hop	Idaho 7	30 g	7 day(s)	12.7 %
Dry Hop	Cascade PL	40 g	7 day(s)	5.2 %

Dry Hop	Citra	40 g	7 day(s)	12 %
---------	-------	------	----------	------

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M66 Hophead Ale	Ale	Dry	10.5 g	Mangrove Jack's

Extras

Type	Name	Amount	Use for	Time
Spice	Herbata Earl Grey	40 g	Secondary	7 day(s)
Spice	Herbata zielona jaśminowa	100 g	Secondary	7 day(s)