TeaPA

- Gravity 11 BLG
- ABV 4.4 %
- IBU **50**
- SRM **7.1**
- Style American Pale Ale

Batch size

- Expected quantity of finished beer 24 liter(s)
- Trub loss 5 %
- Size with trub loss 25.2 liter(s)
- · Boil time 60 min
- Evaporation rate 10 %/h
- Boil size 30.4 liter(s)

Mash information

- Mash efficiency 75 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 15.9 liter(s)
- Total mash volume 21.2 liter(s)

Steps

- Temp **64 C**, Time **30 min** Temp **71 C**, Time **30 min**
- Temp 78 C, Time 15 min

Mash step by step

- Heat up 15.9 liter(s) of strike water to 71.3C
- Add grains
- Keep mash 30 min at 64C
- Keep mash 30 min at 71C
- Keep mash 15 min at 78C
- Sparge using 19.8 liter(s) of 76C water or to achieve 30.4 liter(s) of wort

Fermentables

Туре	Name	Amount	Yield	EBC
Grain	Słód Pilsner® 2,5-4,5 EBC Weyermann	4.5 kg <i>(84.9%)</i>	80 %	4
Grain	Słód Caramunich Typ II Weyermann	0.3 kg <i>(5.7%)</i>	73 %	150
Grain	Carabelge	0.5 kg <i>(9.4%)</i>	80 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	15 g	60 min	12.8 %
Boil	Mosaic	20 g	60 min	12.1 %
Boil	Amarillo	30 g	5 min	8.9 %
Aroma (end of boil)	Mosaic	50 g	1 min	12.1 %

Yeasts

Name	Туре	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale

Extras

Туре	Name	Amount	Use for	Time
Fining	mech	5 g	Boil	15 min
Flavor	skorka cytryny	50 g	Boil	3 min