

## Tea APA

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- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **39**
- SRM **6.3**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **30.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4.5 liter(s) / kg**
- Mash size **26.8 liter(s)**
- Total mash volume **32.7 liter(s)**

### Steps

- Temp **63.5 C**, Time **30 min**
- Temp **70.5 C**, Time **30 min**
- Temp **78 C**, Time **15 min**

### Mash step by step

- Heat up **26.8 liter(s)** of strike water to **68.3C**
- Add grains
- Keep mash **30 min** at **63.5C**
- Keep mash **30 min** at **70.5C**
- Keep mash **15 min** at **78C**
- Sparge using **10 liter(s)** of **76C** water or to achieve **30.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2.5 kg (41%)	79 %	6
Grain	Strzegom Pilzneński	1.7 kg (27.9%)	80 %	4
Grain	Viking Wheat Malt	1 kg (16.4%)	83 %	5
Grain	Carabelge	0.5 kg (8.2%)	80 %	30
Grain	Caramunich® typ I	0.25 kg (4.1%)	73 %	80
Sugar	Milk Sugar (Lactose)	0.15 kg (2.5%)	76.1 %	0

### Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Columbus/Tomahawk/Zeus	22 g	80 min	15.5 %
Boil	Palisade	25 g	5 min	6.1 %
Dry Hop	Citra	50 g	14 day(s)	12 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	125 ml	---

## Extras

Type	Name	Amount	Use for	Time
Flavor	Herbata Earl Grey	50 g	Secondary	14 day(s)

## Notes

- 100% wody RO (Amber Balanced)

Ca 49

Mg 8

Na 16

SO4 77

Cl 67

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