

TEAPA

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **35**
- SRM **6.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **66 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **50 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (80%)	80 %	5
Grain	Karmelowy Jasny 30EBC	1 kg (20%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	25 g	50 min	13.5 %
Dry Hop	Magnum	25 g	14 day(s)	13.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Dry	12 g	Mangrove Jack's

Extras

Type	Name	Amount	Use for	Time
Herb	Herbata zielona Banacha	100 g	Boil	10 min

Herb	Herbata zielona Bancha	100 g	Primary	10 day(s)
Herb	Herbata zielona Bancha	100 g	Secondary	14 day(s)