### **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**

Туре	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (80%)	80 %	5
Grain	Karmelowy Jasny 30EBC	1 kg <i>(20%)</i>	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	Туре	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Dry	12 g	Mangrove Jack's

#### **Extras**

Туре	Name	Amount	Use for	Time
Herb	Herbata zielona Bancha	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)