## warka29

- Gravity 12.9 BLG
- ABV **5.2** %
- IBU **18**
- SRM **4.9**
- Style American Pale Ale

### **Batch size**

- Expected quantity of finished beer 23 liter(s)
- Trub loss 5 %
- Size with trub loss 24.1 liter(s)
- Boil time 60 min
- Evaporation rate 10 %/h
- Boil size 29 liter(s)

# **Mash information**

- Mash efficiency 75 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 17.8 liter(s)
- Total mash volume 23.7 liter(s)

### **Steps**

- Temp 63 C, Time 30 min
  Temp 72 C, Time 40 min

# Mash step by step

- Heat up 17.8 liter(s) of strike water to 70.2C
- Add grains
- Keep mash 30 min at 63C
- Keep mash 40 min at 72C
- Sparge using 17.1 liter(s) of 76C water or to achieve 29 liter(s) of wort

### **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	hook head-pilsner	2.62 kg <i>(44.3%)</i>	80.5 %	3.5
Grain	best pale ale	1.1 kg <i>(18.6%)</i>	80.5 %	6
Grain	BESTMALZ - Best Minich	1.2 kg <i>(20.3%)</i>	80.5 %	15
Grain	Briess - Wheat Malt, White	0.25 kg <i>(4.2%)</i>	85 %	5
Grain	Honey Malt	0.25 kg <i>(4.2%)</i>	80 %	13
Grain	Briess - Carapils Malt	0.25 kg <i>(4.2%)</i>	74 %	3
Grain	Oats, Flaked	0.25 kg <i>(4.2%)</i>	80 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (USA)	32 g	40 min	3.75 %
Boil	Mosaic	20 g	10 min	11.5 %

## **Yeasts**

Name	Туре	Form	Amount	Laboratory
Safale US-05	Ale	Slant	100 ml	Fermentis

### **Notes**

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