# warka 25 duza

- Gravity 11.9 BLG
- ABV 4.8 %
- IBU **16**
- SRM 10
- Style American Brown 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 16.3 liter(s)
- Total mash volume 21.8 liter(s)

### **Steps**

- Temp 64 C, Time 30 min
  Temp 72 C, Time 40 min

# Mash step by step

- Heat up 16.3 liter(s) of strike water to 71.4C
- Add grains
- Keep mash 30 min at 64C
- Keep mash 40 min at 72C
- Sparge using 18.2 liter(s) of 76C water or to achieve 29 liter(s) of wort

#### **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	hook head pilsner	4.8 kg (88.1%)	80.5 %	3.5
Grain	Weyermann Caramunich 3	0.1 kg <i>(1.8%)</i>	76 %	150
Grain	roasted malt chocolate	0.1 kg <i>(1.8%)</i>	80.5 %	900
Grain	BESTMALZ - Best Wheat Malt Dark	0.25 kg <i>(4.6%)</i>	82 %	18
Grain	Oats, Flaked	0.2 kg (3.7%)	80 %	2

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (USA)	40 g	40 min	3.75 %
Boil	Mosaic	16 g	5 min	11.5 %

## **Yeasts**

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

#### **Notes**

 przed gotowaniem wyszło 1048-12blg po gotowaniu wyszło 1054-13.5blg