## **Amer Pale Ale**

- Gravity 13.1 BLG
- ABV 5.3 %
- IBU **19**
- SRM **4.2**
- Style American Wheat or Rye Beer

### **Batch size**

- Expected quantity of finished beer 15 liter(s)
- Trub loss 15 %
- Size with trub loss 17.3 liter(s)
- · Boil time 60 min
- Evaporation rate 10 %/h
- Boil size 20.7 liter(s)

### **Mash information**

- Mash efficiency 70 %
- Liquor-to-grist ratio 5 liter(s) / kg
- Mash size 20 liter(s)
- Total mash volume 24 liter(s)

### **Steps**

- Temp 62 C, Time 15 min
  Temp 72 C, Time 60 min
- Temp 78 C, Time 10 min

# Mash step by step

- Heat up 20 liter(s) of strike water to 66.2C
- Add grains
- Keep mash 15 min at 62C
- Keep mash 60 min at 72C
- Keep mash 10 min at 78C
- Sparge using 4.7 liter(s) of 76C water or to achieve 20.7 liter(s) of wort

### **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg <i>(77.8%)</i>	80 %	5
Grain	Briess - Wheat Malt, White	0.5 kg <i>(11.1%)</i>	75 %	2
Adjunct	Płatki owsiane	0.5 kg (11.1%)	60 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Mash	Columbus/Tomahawk/Zeus	5 g	60 min	15.5 %
Boil	Magnum	6 g	60 min	12 %
Boil	Amarillo	5 g	15 min	9.8 %
Whirlpool	Citra	5 g	20 min	12 %
Whirlpool	Cascade	5 g	20 min	8.3 %
Whirlpool	Amarillo	5 g	20 min	9.8 %

### **Yeasts**

Name	Туре	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis

