#### .BELGIAN PA

- Gravity 12.9 BLG
- ABV ---
- IBU 23
- SRM **9.2**
- Style Belgian 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 80 %
- Liquor-to-grist ratio 3 liter(s) / kg Mash size 15.3 liter(s)
- Total mash volume 20.4 liter(s)

## **Steps**

- Temp 64 C, Time 20 min
  Temp 72 C, Time 40 min
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up 15.3 liter(s) of strike water to 71.3C
- · Add grains
- Keep mash 20 min at 64C
- Keep mash 40 min at 72C
- Keep mash 1 min at 78C
- Sparge using 18.8 liter(s) of 76C water or to achieve 29 liter(s) of wort

### **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg <i>(49%)</i>	80 %	5
Grain	Strzegom Monachijski typ I	2 kg (39.2%)	79 %	16
Grain	Abbey Castle	0.3 kg <i>(5.9%)</i>	80 %	45
Grain	carabelg	0.3 kg <i>(5.9%)</i>	74 %	30

# Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	30 g	55 min	5.1 %
Boil	East Kent Goldings	30 g	15 min	5.1 %

#### **Yeasts**

Name	Туре	Form	Amount	Laboratory
FM20 Białe Walonki	Wheat	Slant	150 ml	Fermentum Mobile