### **APA**

- Gravity 12.9 BLG
- ABV ----
- IBU **46**
- SRM **10.1**
- Style American Pale Ale

### **Batch size**

- Expected quantity of finished beer 24 liter(s)
- Trub loss 10 %
- Size with trub loss 26.4 liter(s)
- · Boil time 65 min
- Evaporation rate 15 %/h
- Boil size 30.7 liter(s)

### **Mash information**

- Mash efficiency 78 %
- Liquor-to-grist ratio 3.5 liter(s) / kg
- Mash size 19.3 liter(s)
- Total mash volume 24.8 liter(s)

### **Steps**

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

## Mash step by step

- Heat up 19.3 liter(s) of strike water to 70.3C
- Add grains
- Keep mash 40 min at 64C
- Keep mash 30 min at 72C
- Sparge using 16.9 liter(s) of 76C water or to achieve 30.7 liter(s) of wort

#### **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	4 kg (72.7%)	85 %	7
Grain	Weyermann pszeniczny jasny	1 kg <i>(18.2%)</i>	80 %	6
Grain	Caramunich Malt	0.5 kg (9.1%)	71.7 %	100

#### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	26 g	60 min	13.2 %
Aroma (end of boil)	Cascade	25 g	20 min	9.7 %
Aroma (end of boil)	Cascade	25 g	0 min	9.7 %
Dry Hop	Cascade	20 g	4 day(s)	6 %
Dry Hop	Cascade	15 g	2 day(s)	6 %
Dry Hop	Centennial	15 g	2 day(s)	10.5 %

#### **Yeasts**

Name	Туре	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	40 ml	Fermentum Mobile

# **Extras**

Туре	Name	Amount	Use for	Time
Other	liście limonki	10 g	Boil	10 min