### **German Pils**

- Gravity 13.1 BLG
- ABV **5.3** %
- IBU 37
- SRM **3.8**
- Style German Pilsner (Pils)

### **Batch size**

- Expected quantity of finished beer 21 liter(s)
- Trub loss 5 %
- Size with trub loss 22.1 liter(s)
- · Boil time 60 min
- Evaporation rate 10 %/h
- Boil size 26.5 liter(s)

## **Mash information**

- Mash efficiency 75 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 16.5 liter(s)
- Total mash volume 22 liter(s)

### **Steps**

- Temp **50 C**, Time **10 min** Temp **62 C**, Time **30 min**
- Temp 72 C, Time 30 min

## Mash step by step

- Heat up 16.5 liter(s) of strike water to 55C
- Add grains
- Keep mash 10 min at 50C
- Keep mash 30 min at 62C
- Keep mash 30 min at 72C
- Sparge using 15.5 liter(s) of 76C water or to achieve 26.5 liter(s) of wort

### **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Słód Pilsner® 2,5-4,5 EBC Weyermann	5 kg <i>(90.9%)</i>	80 %	4
Grain	Weyermann - Carapils	0.5 kg <i>(9.1%)</i>	78 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hersbrucker	50 g	60 min	2.7 %
Boil	Marynka	25 g	30 min	7.9 %
Aroma (end of boil)	Marynka	25 g	10 min	7.9 %

#### **Yeasts**

Name	Туре	Form	Amount	Laboratory
Saflager W 34/70	Lager	Slant	1000 ml	Fermentis

# **Extras**

Туре	Name	Amount	Use for	Time
Herb	trawa cytrynowa	10 g	Secondary	10 day(s)

Fining	mech irlandzki	10 a	Boil	10 min
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