## Kolońskie

- Gravity 11.9 BLG
- ABV 4.8 %
- IBU **25**
- SRM **3.7**
- Style Kölsch

#### **Batch size**

- Expected quantity of finished beer 22 liter(s)
- Trub loss 5 %
- Size with trub loss 23.1 liter(s)
- · Boil time 70 min
- Evaporation rate 10 %/h
- Boil size 28.3 liter(s)

#### **Mash information**

- Mash efficiency 77 %
- Liquor-to-grist ratio 6 liter(s) / kg
- Mash size 30 liter(s)
- Total mash volume 35 liter(s)

#### **Steps**

- Temp **62 C**, Time **30 min** Temp **71 C**, Time **40 min**
- Temp 78 C, Time 10 min

# Mash step by step

- Heat up 30 liter(s) of strike water to 65.5C
- Add grains
- Keep mash 30 min at 62C
- Keep mash 40 min at 71C
- Keep mash 10 min at 78C
- Sparge using 3.3 liter(s) of 76C water or to achieve 28.3 liter(s) of wort

### **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Pilzneński	4.5 kg <i>(90%)</i>	81 %	4
Grain	Strzegom Wiedeński	0.5 kg <i>(10%)</i>	79 %	10

### Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Hallertau Spalt Select	35 g	80 min	4.7 %
Boil	Hallertau Spalt Select	15 g	30 min	4.7 %

# **Yeasts**

Name	Туре	Form	Amount	Laboratory
Safale K-97	Ale	Dry	22 g	Fermentis

## **Extras**

Туре	Name	Amount	Use for	Time
Fining	whirlfoc	2 g	Boil	15 min

#### **Notes**

•	Ferment at 60° F (16° C). Allow the beer to lager for at least 4 weeks before bottling or serving. Wh finished, carbonate the beer to approximately 2.5 volumes.  Jan 10, 2018, 2:15 PM	ien