### Król Austrii

- Gravity 15.4 BLG
- ABV 6.5 %
- IBU **21**
- SRM **9.1**
- Style Vienna Lager

#### **Batch size**

- Expected quantity of finished beer 20 liter(s)
- Trub loss 5 %
- Size with trub loss 22 liter(s)
- · Boil time 60 min
- Evaporation rate 10 %/h
- Boil size 26.4 liter(s)

#### **Mash information**

- Mash efficiency 75 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 19.6 liter(s)
- Total mash volume 26.2 liter(s)

#### **Steps**

- Temp 40 C, Time 1 min
   Temp 54 C, Time 10 min
- Temp 63 C, Time 40 min
- Temp 72 C, Time 20 min
  Temp 76 C, Time 1 min

## Mash step by step

- Heat up 19.6 liter(s) of strike water to 43.3C
- Add grains
- Keep mash 1 min at 40C
- Keep mash 10 min at 54C
- Keep mash 40 min at 63C
- Keep mash 20 min at 72C
- Keep mash 1 min at 76C
- Sparge using 13.4 liter(s) of 76C water or to achieve 26.4 liter(s) of wort

#### **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	4 kg (61.1%)	79 %	10
Grain	Strzegom Monachijski typ I	2 kg <i>(30.5%)</i>	79 %	16
Grain	Carahell	0.2 kg <i>(3.1%)</i>	77 %	26
Grain	Caramunich® typ I	0.25 kg <i>(3.8%)</i>	73 %	80
Grain	zakwaszający	0.1 kg <i>(1.5%)</i>	75 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Tradition	30 g	60 min	5.5 %
Boil	Saaz (Czech Republic)	20 g	20 min	4.5 %

### **Yeasts**

Name Typ	e Form	Amount	Laboratory
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WLP838 - Southern German Lager Yeast	Lager	Liquid	50 ml	White Labs
Starter 2 litry.				

# **Extras**

Туре	Name	Amount	Use for	Time
Fining	mech irlandzki	7 g	Boil	15 min