## **#1 Witbier Kolender**

- Gravity 12.1 BLG
- ABV ----
- IBU **15**
- SRM 4.3
- Style Witbier

### **Batch size**

- Expected quantity of finished beer 20 liter(s)
- Trub loss 10 %
- Size with trub loss 22 liter(s)
- Boil time 60 min
- Evaporation rate 15 %/h
- Boil size 25.3 liter(s)

## **Mash information**

- Mash efficiency 65 %
- Liquor-to-grist ratio 3.5 liter(s) / kg
- Mash size 18.6 liter(s)
- Total mash volume 23.9 liter(s)

### **Steps**

- Temp **45 C**, Time **30 min** Temp **53 C**, Time **10 min**
- Temp 64 C, Time 50 min
- Temp 72 C, Time 10 min
  Temp 78 C, Time 0 min

### Mash step by step

- Heat up 18.6 liter(s) of strike water to 48.6C
- Add grains
- Keep mash 30 min at 45C
- Keep mash 10 min at 53C
- Keep mash 50 min at 64C
- Keep mash 10 min at 72C
- Keep mash 0 min at 78C
- Sparge using 12 liter(s) of 76C water or to achieve 25.3 liter(s) of wort

## **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Wheat, Torrified	2 kg <i>(37.7%)</i>	79 %	4
Grain	Pilzneński	3 kg <i>(56.6%)</i>	81 %	4
Grain	Oats, Flaked	0.3 kg <i>(5.7%)</i>	80 %	2

#### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	25 g	60 min	5 %

#### **Yeasts**

Name	Туре	Form	Amount	Laboratory
Classic Belgian Witbier	Ale	Dry	10 g	Gozdawa

# **Extras**

Туре	Name	Amount	Use for	Time
Spice	kolendra	15 g	Boil	5 min

Spice	curacao	20 g	Boil	5 min
Other	skórka pomarańczy	30 g	Boil	5 min