

# #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

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

## Hops

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

## Yeasts

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

## Extras

Type	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