

# Witbier

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **11**
- SRM **3.4**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

## Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.1 liter(s)**
- Total mash volume **8.2 liter(s)**

## Steps

- Temp **50 C**, Time **15 min**
- Temp **65 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **6.1 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **15 min** at **50C**
- Keep mash **45 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **9.1 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale ale IREKS	1.04 kg (51%)	80 %	6
Grain	Pszeniczny IREKS	0.5 kg (24.5%)	85 %	4
Grain	Płatki pszeniczne	0.5 kg (24.5%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	10 g	50 min	5 %
Whirlpool	Tradition	5 g	10 min	5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
K-97	Ale	Dry	11 g	---

## Extras

Type	Name	Amount	Use for	Time
Spice	Kolendra indyjska	8 g	Boil	5 min

Spice	skórka pomarańczy słodkiej	10 g	Boil	5 min
Spice	skórka pomarańczy gorzkiej	10 g	Boil	5 min
Spice	Skórka cytryny	8 g	Boil	5 min

### Notes

- Temperatura fermentacji 18 st, po ustaniu spadku ekstraktu obniżyć do 10 na 3 dni, potem do 2 stopni na 14 dni  
*May 28, 2019, 9:47 PM*