

# Witbier

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **25**
- SRM **3.3**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **27.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **73 C**, Time **30 min**
- Temp **77 C**, Time **10 min**

## Mash step by step

- Heat up **13.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **73C**
- Keep mash **10 min** at **77C**
- Sparge using **18.6 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.5 kg (55.6%)	81 %	4
Grain	Pszeniczny	1.5 kg (33.3%)	85 %	4
Grain	Płatki pszeniczne	0.5 kg (11.1%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Willamette	30 g	60 min	5 %
Aroma (end of boil)	Willamette	10 g	15 min	5 %
Aroma (end of boil)	Saaz (Czech Republic)	15 g	15 min	4.5 %
Boil	Saaz (Czech Republic)	15 g	5 min	4.5 %
Dry Hop	Willamette	20 g	15 day(s)	5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM20 Białe Walonki	Wheat	Liquid	20 ml	Fermentum Mobile
Starter drożdżowy				

## Extras

Type	Name	Amount	Use for	Time
Flavor	skórka słodkiej pomarańczy	60 g	Boil	15 min
Flavor	skórka grzkiej pomarańczy	40 g	Boil	15 min
Flavor	trawa cytrynowa	40 g	Boil	15 min
Spice	kolendra	20 g	Boil	15 min