

## Witbier #2

- Gravity **11.6 BLG**
- ABV ---
- IBU **29**
- SRM **4**
- 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 **70 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **15.2 liter(s)**
- Total mash volume **19.8 liter(s)**

### Steps

- Temp **50 C**, Time **20 min**
- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **15.2 liter(s)** of strike water to **54.5C**
- Add grains
- Keep mash **20 min** at **50C**
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2 kg (43.5%)	81 %	4
Grain	Pszeniczny	1 kg (21.7%)	85 %	4
Grain	Barley, Flaked	0.5 kg (10.9%)	70 %	4
Grain	Oats, Flaked	0.8 kg (17.4%)	85 %	5
Grain	Wheat, Flaked	0.3 kg (6.5%)	77 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	50 min	10 %
Boil	Cascade	25 g	10 min	6 %
Dry Hop	Cascade	25 g	10 day(s)	6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Liquid	10 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Spice	kolendra	15 g	Boil	5 min
Spice	skórka pomarańczy	20 g	Boil	5 min
Spice	skórka cytryny	20 g	Boil	5 min