

## Witbier v.2.1

---

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **32**
- SRM **3.7**
- Style **Witbier**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **19.6 liter(s)**

### Steps

- Temp **66 C**, Time **30 min**
- Temp **100 C**, Time **10 min**
- Temp **50 C**, Time **30 min**
- Temp **68 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **0 min**

### Mash step by step

- Heat up **14.7 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **30 min** at **50C**
- Keep mash **30 min** at **66C**
- Keep mash **45 min** at **68C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **78C**
- Keep mash **10 min** at **100C**
- Sparge using **15.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pszeniczny	1 kg (20.4%)	81 %	6
Grain	Strzegom Pilzneński	2.5 kg (51%)	80 %	4
Grain	Płatki pszeniczne	0.4 kg (8.2%)	85 %	3
Grain	Płatki owsiane	0.8 kg (16.3%)	85 %	3
Grain	mąka pszeniczna	0.2 kg (4.1%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Topaz	5.3 g	60 min	15.5 %
Boil	Challenger	19.6 g	30 min	8.4 %
Aroma (end of boil)	Challenger	10 g	10 min	8.4 %
Aroma (end of boil)	East Kent Goldings	22 g	10 min	6.4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-33	Ale	Slant	100 ml	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Spice	kolendra	5 g	Boil	15 min
Spice	curacao	5 g	Boil	15 min
Spice	skórka pomarańczy świeżej	14 g	Boil	5 min
Spice	curacao	10 g	Boil	5 min
Spice	kolendra	5 g	Boil	5 min