

## #29 Wicia 1

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **21**
- SRM **2.8**
- Style **Witbier**

### Batch size

- Expected quantity of finished beer **28 liter(s)**
- Trub loss **10 %**
- Size with trub loss **31.6 liter(s)**
- Boil time **70 min**
- Evaporation rate **12 %/h**
- Boil size **37.6 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.4 liter(s)**
- Total mash volume **13.8 liter(s)**

### Steps

- Temp **55 C**, Time **20 min**
- Temp **64 C**, Time **90 min**
- Temp **76 C**, Time **8 min**

### Mash step by step

- Heat up **10.4 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **20 min** at **55C**
- Keep mash **90 min** at **64C**
- Keep mash **8 min** at **76C**
- Sparge using **30.7 liter(s)** of **76C** water or to achieve **37.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3 kg (55%)	81 %	4
Adjunct	Pszenica niesłodowana	2 kg (36.7%)	75 %	3
Grain	Oats, Flaked	0.45 kg (8.3%)	80 %	2

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 g	60 min	9.7 %
Boil	Lublin (Lubelski)	20 g	60 min	4.3 %
Boil	Saaz (Czech Republic)	15 g	15 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
gozdawa fruit blanche g1	Wheat	Slant	200 ml	---

### Extras

Type	Name	Amount	Use for	Time
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Spice	Kolendra	10 g	Boil	7 min
Spice	Trawa cytrynowa	10 g	Boil	3 min
Spice	Skórka cytryny	15 g	Boil	5 min
Spice	Skórka sł. pomarańczy	36 g	Boil	5 min
Spice	Skórka grejfruta	25 g	Boil	5 min