

## TEST wydajności zacierania i strat

- Gravity **14.5 BLG**
- ABV ---
- IBU **26**
- SRM **4.4**
- 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 **18 %/h**
- Boil size **30.7 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **28.4 liter(s)**

### Steps

- Temp **52 C**, Time **10 min**
- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **21.3 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **60 min** at **66C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.5 liter(s)** of **76C** water or to achieve **30.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszenica niesłodowana	1 kg (14.1%)	75 %	3
Grain	Strzegom Pilzneński	4.7 kg (66.2%)	80 %	4
Grain	Strzegom Pszeniczny	1 kg (14.1%)	81 %	6
Grain	Płatki owsiane	0.4 kg (5.6%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	30 g	50 min	6 %
Aroma (end of boil)	Lublin (Lubelski)	30 g	10 min	4 %
Aroma (end of boil)	Citra	30 g	5 min	12 %
Dry Hop	Citra	20 g	4 day(s)	12 %
Dry Hop	Lublin (Lubelski)	20 g	4 day(s)	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Safeale K-97	Ale	Dry	11.5 g	---
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### Extras

Type	Name	Amount	Use for	Time
Flavor	Curacao	20 g	Boil	10 min
Flavor	Skórka słodkiej pomarańczy	20 g	Boil	10 min
Flavor	Kolendra	25 g	Boil	10 min
Flavor	Trawa cytrynowa	15 g	Boil	5 min