

## Słoneczne 3

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- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **19**
- SRM **3.4**
- Style **Witbier**

### Batch size

- Expected quantity of finished beer **28 liter(s)**
- Trub loss **5 %**
- Size with trub loss **29.4 liter(s)**
- Boil time **50 min**
- Evaporation rate **10 %/h**
- Boil size **34.9 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.8 liter(s)**
- Total mash volume **18.4 liter(s)**

### Steps

- Temp **52 C**, Time **50 min**
- Temp **68 C**, Time **90 min**
- Temp **72 C**, Time **15 min**

### Mash step by step

- Heat up **13.8 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **50 min** at **52C**
- Keep mash **90 min** at **68C**
- Keep mash **15 min** at **72C**
- Sparge using **25.7 liter(s)** of **76C** water or to achieve **34.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.2 kg (33.3%)	80 %	4
Adjunct	Pszenica niesłodowana	2 kg (30.3%)	75 %	3
Grain	Oats, Flaked	1 kg (15.2%)	80 %	2
Owies ześrutowany, aby w piwie znalazła się łuska				
Grain	Pszeniczny	0.5 kg (7.6%)	85 %	4
Grain	Słód diastatyczny	0.6 kg (9.1%)	100 %	6
Grain	Acid Malt	0.3 kg (4.5%)	58.7 %	6

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	hallertauer taurus	15 g	40 min	14 %
Boil	Saaz (Czech Republic)	25 g	15 min	4.5 %
Boil	Hersbrucker	5 g	5 min	3 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Safale S-33	Ale	Dry	11.5 g	Fermentis
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### Extras

Type	Name	Amount	Use for	Time
Spice	Kolendra	10 g	Boil	5 min
Flavor	Curacao	10 g	Boil	5 min
Spice	Kolendra	5 g	Boil	1 min
Flavor	Curacao	10 g	Boil	1 min