

## taki sobie pale

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- Gravity **11.4 BLG**
- ABV ---
- IBU **23**
- SRM **7.8**

### 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 **12.6 liter(s)**
- Total mash volume **16.8 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**

### Mash step by step

- Heat up **12.6 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4 kg (95.2%)	79 %	6
Grain	Strzegom Karmel 150	0.2 kg (4.8%)	75 %	110

### Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Simcoe	12 g	60 min	13 %
Aroma (end of boil)	Cascade	24 g	5 min	6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	11 g	---