

## ?Sosnowe Pale Ale?

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **77**
- SRM **4.8**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

### Steps

- Temp **55 C**, Time **5 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

### Mash step by step

- Heat up **18 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (83.3%)	81 %	4
Grain	Weyermann pszeniczny jasny	0.5 kg (8.3%)	80 %	6
Grain	Strzegom Karmel 30	0.5 kg (8.3%)	75 %	30

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	40 g	60 min	11 %
Boil	lunga	50 g	15 min	11 %
Boil	Simcoe	40 g	5 min	13.2 %
Dry Hop	Simcoe	40 g	7 day(s)	13.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
------	------	--------	---------	------

Fining	mech irlandzki	5 g	Boil	5 min
--------	----------------	-----	------	-------

## Notes

- zakup surowców: 64zł  
+ drożdże: 9.5zł  
+ mech: 15zł  
-----  
razem: 81,5zł.  
*Feb 9, 2018, 10:17 AM*