

## #18 Pawlos, session Pale Ale

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- Gravity **10.5 BLG**
- ABV ---
- IBU **28**
- SRM **11.4**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.4 liter(s)**
- Total mash volume **17.9 liter(s)**

### Steps

- Temp **69 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **13.4 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **60 min** at **69C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **20.9 liter(s)** of **76C** water or to achieve **29.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	0.7 kg (15.6%)	79 %	10
Grain	Strzegom Pilzneński	2.5 kg (55.8%)	80 %	4
Grain	Strzegom Karmel 150	0.5 kg (11.2%)	75 %	150
Grain	Pszeniczny	0.5 kg (11.2%)	85 %	4
Grain	Weyermann - Carapils	0.28 kg (6.3%)	78 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	15 g	45 min	15.5 %
Dry Hop	Cascade	35 g	4 day(s)	6 %
Dry Hop	Citra	65 g	4 day(s)	12 %
Aroma (end of boil)	Simcoe	90 g	0 min	13 %
Boil	simcoe	10 g	10 min	13 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Safale S-04	Ale	Dry	11 g	Safale
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### Extras

Type	Name	Amount	Use for	Time
Water Agent	gips	5 g	Mash	60 min

### Notes

- 90 simcoe na chmielenie whirpoolowe - zadane po wyłączeniu palnika, przetrzymanie w 70c na 60min  
*May 26, 2016, 10:33 AM*