

# Puławski Ale

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **46**
- SRM **8.8**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **10 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **31.2 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

## Steps

- Temp **69 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **21 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **69C**
- Keep mash **1 min** at **76C**
- Sparge using **16.2 liter(s)** of **76C** water or to achieve **31.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilznieński	5 kg (83.3%)	81 %	5
Grain	Płatki pszeniczne	0.5 kg (8.3%)	85 %	3
Grain	Carmel Aromatic Viking	0.5 kg (8.3%)	80 %	180

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Puławski	50 g	60 min	6.9 %
Boil	Puławski	25 g	30 min	6.9 %
Boil	Puławski	25 g	15 min	6.9 %
Dry Hop	Puławski	100 g	5 day(s)	6.9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM11 Wichrowe Wzgórza	Ale	Slant	150 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
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Water Agent	Chlorek wapnia	2 g	Boil	60 min
Water Agent	Gips	3.5 g	Boil	60 min
Water Agent	Soda	1 g	Boil	60 min
Other	Cynk w tabletkach	0.2 g	Boil	60 min
Fining	Whirlflock	0.5 g	Boil	15 min

## Notes

- Woda z Biedry 1:  
HCO - 220  
SO - 36  
Cl - 3  
Ca - 41  
Mg - 24  
Na - 9  
K - 2  
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