

## #12 Polsko Czeskie Pale Ale

- Gravity **8 BLG**
- ABV **3.1 %**
- IBU **38**
- SRM **5**
- Style **American Barleywine**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **0 %**
- Size with trub loss **15 liter(s)**
- Boil time **180 min**
- Evaporation rate **10 %/h**
- Boil size **21.5 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.4 liter(s)**
- Total mash volume **9.9 liter(s)**

### Steps

- Temp **63 C**, Time **30 min**
- Temp **67 C**, Time **60 min**
- Temp **74 C**, Time **30 min**

### Mash step by step

- Heat up **7.4 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **60 min** at **67C**
- Keep mash **30 min** at **74C**
- Sparge using **16.6 liter(s)** of **76C** water or to achieve **21.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słodownia Strzegom - pale ale	2.15 kg (86.7%)	79 %	6
Grain	Słodownia Strzegom - wiedeński	0.25 kg (10.1%)	79 %	7
Grain	Castle Malting - Chateau - Crystal 150 EBC	0.08 kg (3.2%)	78 %	150

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	60 min	9.5 %
Boil	Kazbek	30 g	10 min	6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM52 - Amerykański Sen	Ale	Liquid	200 ml	Fermentum Mobile