

Polskie Pale Ale

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **39**
- SRM **7.7**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **20.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **21 liter(s)**

Steps

- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **20 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **20 min** at **76C**
- Sparge using **10.2 liter(s)** of **76C** water or to achieve **20.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (95.2%)	81 %	4
Grain	Strzegom Karmel 150	0.25 kg (4.8%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %
Boil	Lublin (Lubelski)	20 g	10 min	4 %
Boil	Lublin (Lubelski)	20 g	0 min	4 %
Dry Hop	Citra	50 g	4 day(s)	12 %
Dry Hop	Mosaic	25 g	4 day(s)	10 %
Dry Hop	Equinox	30 g	4 day(s)	13.1 %

Yeasts

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