

Polish Pale Ale

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **18**
- SRM **3.9**
- Style **Standard/Ordinary Bitter**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **66 C**, Time **90 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **90 min** at **66C**
- Sparge using **13 liter(s)** of **76C** water or to achieve **23 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.5 kg (70%)	81 %	4
Grain	Płatki orkiszowe	1 kg (20%)	80 %	4
Grain	Płatki owsiane	0.5 kg (10%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Puławski	15 g	50 min	8 %
Aroma (end of boil)	Puławski	15 g	10 min	8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	23 g	---