

Polskie Ale

- Gravity **11.9 BLG**
- ABV ---
- IBU **46**
- SRM **5.5**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **28.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **67 C**, Time **30 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **14.4 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **30 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **19.1 liter(s)** of **76C** water or to achieve **28.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4.6 kg (95.8%)	80 %	4
Grain	Karmelowy Czerwony	0.2 kg (4.2%)	75 %	59

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	80 min	10 %
Boil	Lublin (Lubelski)	20 g	40 min	4 %
Boil	Sybilla	20 g	10 min	3.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale