

#13 Polskie Ale

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **34**
- SRM **6.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **16.3 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11.2 liter(s)**
- Total mash volume **14.4 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **77 C**, Time **5 min**

Mash step by step

- Heat up **11.2 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **5 min** at **77C**
- Sparge using **8.3 liter(s)** of **76C** water or to achieve **16.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3 kg (93.8%)	80 %	4
Grain	Biscuit Malt	0.1 kg (3.1%)	79 %	45
Grain	Strzegom Karmel 150	0.1 kg (3.1%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	6 g	60 min	10 %
Boil	Marynka	8 g	40 min	10 %
Boil	Lublin (Lubelski)	25 g	20 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	120 ml	Fermentis