

Polish Ale

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **29**
- SRM **3.8**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **14 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (83.3%)	81 %	4
Grain	Weyermann - Carapils	1 kg (16.7%)	78 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	20 g	60 min	12.4 %
Boil	Lublin (Lubelski)	25 g	15 min	3.8 %
Boil	Lublin (Lubelski)	25 g	5 min	3.8 %
Aroma (end of boil)	Lublin (Lubelski)	40 g	0 min	3.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis