

Polski Pils

- Gravity **17.5 BLG**
- ABV **7.5 %**
- IBU **30**
- SRM **4.4**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.2 liter(s)**
- Total mash volume **17.6 liter(s)**

Steps

- Temp **63 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **13.2 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **10 min** at **76C**
- Sparge using **7 liter(s)** of **76C** water or to achieve **15.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (90.9%)	81 %	4
Grain	Płatki ryżowe	0.4 kg (9.1%)	--- %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Książęcy	15 g	60 min	7 %
Boil	Książęcy	15 g	60 min	7 %
Whirlpool	Książęcy	10 g	0 min	7 %
Dry Hop	Książęcy	10 g	3 day(s)	7 %

Yeasts

Name	Type	Form	Amount	Laboratory
W34/70	Lager	Dry	11 g	---