

polski pils

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **39**
- SRM **3**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **35 liter(s)**
- Trub loss **2 %**
- Size with trub loss **36.4 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **41.7 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **62 C**, Time **10 min**
- Temp **72 C**, Time **45 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **10 min** at **62C**
- Keep mash **45 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **29.7 liter(s)** of **76C** water or to achieve **41.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	6 kg (100%)	81 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Marynka	20 g	120 min	8.8 %
Boil	Marynka	30 g	45 min	8.8 %
Aroma (end of boil)	Marynka	50 g	5 min	8.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - 2278 Czech Pils	Lager	Slant	250 ml	Wyeast Labs