

polski pils

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **30**
- SRM **5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **38 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.4 liter(s)**
- Total mash volume **31.2 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **23.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **22.4 liter(s)** of **76C** water or to achieve **38 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pilsen Malt	5.5 kg (70.5%)	80.5 %	2
Grain	Munich Malt	2.3 kg (29.5%)	80 %	18

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	35 g	50 min	10.6 %
Boil	Cascade PL	25 g	10 min	5.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Gozdawa - W35 German Lager	Lager	Dry	10 g	Gozdawa