

## Polski Pils próba

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- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **23**
- SRM **5.1**
- Style **German Pilsner (Pils)**

### Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **90 min**
- Evaporation rate **7 %/h**
- Boil size **14.6 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11.4 liter(s)**
- Total mash volume **14.6 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **5 min**
- Temp **72 C**, Time **20 min**

### Mash step by step

- Heat up **11.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **6.5 liter(s)** of **76C** water or to achieve **14.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.65 kg (81.5%)	80 %	4
Grain	Strzegom Monachijski typ I	0.6 kg (18.5%)	79 %	16

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	11 g	60 min	11 %
Whirlpool	Lublin (Lubelski)	40 g	0 min	4 %