

Potrzanowski lager

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **28**
- SRM **4.7**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **80 liter(s)**
- Trub loss **5 %**
- Size with trub loss **84 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **101.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **71.2 liter(s)**
- Total mash volume **89 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **63 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **71.2 liter(s)** of strike water to **56C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **20 min** at **63C**
- Keep mash **40 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **47.8 liter(s)** of **76C** water or to achieve **101.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	10.5 kg (59%)	81 %	4
Grain	Monachijski	3 kg (16.9%)	80 %	16
Grain	Pszeniczny	0.8 kg (4.5%)	85 %	4
Grain	Strzegom Wiedeński	3.5 kg (19.7%)	79 %	10

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	styrian eureka	20 g	60 min	13 %
Boil	Hallertau Spalt Select	200 g	15 min	3.1 %
Boil	styrian cardinal	50 g	60 min	8.5 %