

## #31 Polish Pale R.ale

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **42**
- SRM **3.6**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **6 liter(s) / kg**
- Mash size **36 liter(s)**
- Total mash volume **42 liter(s)**

### Steps

- Temp **62 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **36 liter(s)** of strike water to **65.5C**
- Add grains
- Keep mash **50 min** at **62C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **1.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (83.3%)	81 %	4
Grain	Pszeniczny	1 kg (16.7%)	85 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Admiral	20 g	60 min	14.3 %
Boil	Lomik	15 g	20 min	3.8 %
Boil	Lublin (Lubelski)	15 g	20 min	4 %
Boil	Lomik	50 g	10 min	3.8 %
Boil	Lublin (Lubelski)	35 g	10 min	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Gęstwa US-05	Ale	Slant	100 ml	---

### Extras

Type	Name	Amount	Use for	Time
Fining	Tabletka Whirllock	3 g	Boil	10 min

Spice	Trawa cytrynowa	10 g	Boil	10 min
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## Notes

- Zacieranie:  
64 ->62'C na 50 minut  
próba jodowa pozytywna  
72'C na 10 minut  
próba jodowa negatywna  
78'C - 10 minut  
  
Pomiar przed gotowaniem 1.045 OG  
Gotowanie  
Chłodzie 17.15 minut  
OG końcowe 1.048  
Wyszło 24L  
*Apr 6, 2020, 12:12 AM*
- 20.04.2020 - przelanie do wiadra z kranem ( z 24L zostało 21.5L ) i zlanie do butelek  
*Apr 20, 2020, 8:09 PM*