

## #61 Polski Pils

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **33**
- SRM **3.6**
- Style **Bohemian Pilsener**

### Batch size

- Expected quantity of finished beer **50 liter(s)**
- Trub loss **5 %**
- Size with trub loss **52.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **63.3 liter(s)**

### Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **4.5 liter(s) / kg**
- Mash size **54 liter(s)**
- Total mash volume **66 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

### Mash step by step

- Heat up **54 liter(s)** of strike water to **73.3C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **0 min** at **78C**
- Sparge using **21.3 liter(s)** of **76C** water or to achieve **63.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	12 kg (100%)	81 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Zula	50 g	30 min	8.3 %
Boil	Marynka	50 g	50 min	8.4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM30 Bohemska rapsodia	Lager	Slant	1000 ml	Fermentum Mobile

### Extras

Type	Name	Amount	Use for	Time
Fining	Tabletka wirflock	2 g	Boil	10 min

### Notes

- warzenie: 18.02.2022  
Woda do zacierania 54L.  
OG po zacieraniu: 1.060  
Woda do wyśładzania 9L

*Feb 18, 2022, 9:13 PM*

- OG po schłodzeniu do 12'C 1.058 44L

*Feb 19, 2022, 12:57 AM*

- Cena:

27,36zł - Słody 12kg

6zł - Zula 50g

2.80zł -Marynka 50g

0zł - Drożdże ponowne użycie

5.5zł - Media gaz ( 55zł / 10 warzeń)

4zł ~ Woda

Łącznie: 45.66zł

*Feb 22, 2022, 11:28 AM*