

## Polish Brut IPA #2 - Browar na Wyżynie

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **20**
- SRM **3.2**
- Style **Specialty Beer**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **6 %**
- Size with trub loss **22.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27.1 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

### Steps

- Temp **64 C**, Time **60 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Sparge using **17.1 liter(s)** of **76C** water or to achieve **27.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	piłżeński Viking Malt	3.5 kg (70%)	80 %	4
Grain	płatki ryżowe błyskawiczne	1.5 kg (30%)	70 %	1

### Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Zula (Polishhops) - granulát	1 g	80 min	10 %
Whirlpool	Zula (Polishhops) - granulát	50 g	10 min	10 %
Whirlpool	Pałacowy (Polishhops) - granulát	50 g	10 min	8.5 %
Dry Hop	Zula (Polishhops) - granulát	49 g	4 day(s)	10 %
Dry Hop	Pałacowy (Polishhops) - granulát	50 g	4 day(s)	8.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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5 pokolenie FM54 Gorączka kalifornijska	Ale	Slant	300 ml	Fermentum Mobile
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### Extras

Type	Name	Amount	Use for	Time
Water Agent	Siarczan wapnia	4 g	Mash	60 min
Water Agent	Chlorek wapnia	10 g	Mash	60 min
Water Agent	Sól epsom	10 g	Mash	60 min
Water Agent	Kwas fosforowy 75% (zacier i woda do wystadzenia)	2 g	Mash	90 min
Other	Glukoamylaza	4 g	Mash	30 min
Other	Pożywka dla drożdży	5 g	Boil	5 min
Fining	Mech irlandzki	3 g	Boil	15 min

### Notes

- Glukoamylaza dodana do brzezki. Temperatura brzezki <60C na 60minut

Czas ogólny whirlpool 30minut w tym 10minut >80C.

<https://www.brewersfriend.com/mash-chemistry-and-brewing-water-calculator/?id=YX1PDLJ>

Ca+2 Mg+2 Na+ Cl- SO4-2 HCO Residual  
107.6 29.0 131.0 160.8 207.2 18.382 -93.7  
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