

# Polish Golden Ale #1 - Browar na Wyżynie

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **23**
- SRM **3.6**
- Style **Blonde Ale**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **6.5 %**
- Size with trub loss **23.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27.4 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 **30 min**
- Temp **72 C**, Time **30 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Sparge using **17.4 liter(s)** of **76C** water or to achieve **27.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	pilzński Viking Malt	3.5 kg (70%)	81 %	4
Grain	pszeniczny Viking Malt	1 kg (20%)	82 %	5
Grain	Płatki owsiane	0.5 kg (10%)	70 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Zula (polishhops)	10 g	100 min	10 %
Boil	Izabella (polishhops)	10 g	20 min	6 %
Boil	Zula (polishhops)	10 g	20 min	10 %
Whirlpool	Izabella (polishhops)	40 g	0 min	6 %
Whirlpool	Zula (polishhops)	40 g	0 min	10 %
Dry Hop	Izabella (polishhops)	40 g	3 day(s)	6 %
Dry Hop	Zula (polishhops)	40 g	3 day(s)	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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FM54 Gorączka kalifornijska (1 pokolenie)	Ale	Liquid	1000 ml	Fermentum Mobile
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### Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips	10 g	Mash	60 min
Water Agent	Chlorek wapnia	6 g	Mash	60 min
Water Agent	Kwas fosforowy 75% (zacier)	3 g	Mash	60 min
Water Agent	Kwas fosforowy 75% (wysładzanie)	2 g	Mash	60 min
Fining	mech irlandzki	2 g	Boil	15 min
Other	Pożywka dla drożdży Wyest Brouwland	5 g	Boil	15 min

### Notes

- Whirlpool 30min <80C  
<https://www.brewersfriend.com/mash-chemistry-and-brewing-water-calculator/?id=9BPC220>

Ca+2 Mg+2 Na+ Cl- SO4-2 HCO  
 116.6 0.0 131.0 104.1 191.1 0.134  
 SO42-/Cl- ratio: 1.8 Little Bitter PH: 5.32  
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