

# 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 |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|   |     |        |         |                  |
|---|-----|--------|---------|------------------|
| FM54 Gorączka kalifornijska (1 pokolenie) | Ale | Liquid | 1000 ml | Fermentum Mobile |
|---|-----|--------|---------|------------------|

### 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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