

# Belgijka #5 - Belgijskie Pale Ale - Browar na Wyżynie

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **24**
- SRM **7.7**
- Style **Belgian Pale Ale**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **6.5 %**
- Size with trub loss **23.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **18 %/h**
- Boil size **27.7 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 **20 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **17.7 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

## Fermentables

| Type  | Name                             | Amount       | Yield | EBC |
|-------|----------------------------------|--------------|-------|-----|
| Grain | pilzneński Viking Malt           | 2 kg (40%)   | 80 %  | 4   |
| Grain | wiedeński Viking Malt            | 1 kg (20%)   | 79 %  | 9   |
| Grain | monachijski typ II Viking Malt   | 1 kg (20%)   | 78 %  | 22  |
| Grain | cookie (bursztynowy) Viking Malt | 0.5 kg (10%) | 72 %  | 70  |
| Grain | płatki jęczmienne                | 0.5 kg (10%) | 70 %  | 3   |

## Hops

| Use for    | Name                     | Amount | Time    | Alpha acid |
|------------|--------------------------|--------|---------|------------|
| First Wort | Lubelski (PL) - granulát | 35 g   | 100 min | 4.8 %      |
| Whirlpool  | Lubelski (PL) - granulát | 15 g   | 15 min  | 4.8 %      |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|                                |     |        |         |                  |
|--------------------------------|-----|--------|---------|------------------|
| FM28 Habit opata (1 pokolenie) | Ale | Liquid | 1000 ml | Fermentum Mobile |
|--------------------------------|-----|--------|---------|------------------|

### Extras

| Type        | Name                                 | Amount | Use for | Time   |
|-------------|--------------------------------------|--------|---------|--------|
| Water Agent | Kwas fosforowy 75% (zacier)          | 4 g    | Mash    | 60 min |
| Water Agent | Kwas fosforowy 75% (wystadzanie)     | 2 g    | Mash    | 60 min |
| Water Agent | Chlorek wapnia                       | 5 g    | Mash    | 60 min |
| Water Agent | Gips                                 | 4 g    | Mash    | 60 min |
| Fining      | Mech irlandzki                       | 2 g    | Boil    | 15 min |
| Other       | Pożywka dla drożdży Wyeast Brouwland | 5 g    | Boil    | 15 min |

### Notes

- <https://www.brewersfriend.com/mash-chemistry-and-brewing-water-calculator/?id=3QXXV15>

Ca+2 Mg+2 Na+ Cl- SO4-2 HCO  
67.5 0.0 131.0 89.9 92.6 0.073  
SO42-/Cl- ratio: 1.0 Balanced PH: 5.39  
Jan 7, 2019, 2:37 PM