

# Hoppy Belgijka #7 - Belgijskie Pale Ale - Browar na Wyżynie

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **23**
- SRM **8.8**
- Style **Belgian Pale Ale**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **4 %**
- Size with trub loss **21.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.2 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **18.9 liter(s)**

## Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **14.7 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **14.7 liter(s)** of **76C** water or to achieve **25.2 liter(s)** of wort

## Fermentables

| Type  | Name                           | Amount         | Yield | EBC |
|-------|--------------------------------|----------------|-------|-----|
| Grain | pale ale Castle Malting        | 3 kg (71.4%)   | 80 %  | 9   |
| Grain | monachijski typ II Viking Malt | 0.5 kg (11.9%) | 78 %  | 22  |
| Grain | Biscuit® Castle Malting        | 0.5 kg (11.9%) | 77 %  | 50  |
| Grain | Cara Gold Castle Malting       | 0.2 kg (4.8%)  | 78 %  | 120 |

## Hops

| Use for             | Name                             | Amount | Time    | Alpha acid |
|---------------------|----------------------------------|--------|---------|------------|
| First Wort          | Lubelski (Polishhops) - granulat | 30 g   | 100 min | 2.6 %      |
| Boil                | Lubelski (Polishhops) - granulat | 15 g   | 20 min  | 2.6 %      |
| Aroma (end of boil) | Lubelski (Polishhops) - granulat | 155 g  | 5 min   | 2.6 %      |

## Yeasts

| Name                                   | Type | Form  | Amount | Laboratory       |
|--|------|-------|--------|------------------|
| FM27 Artefakty trapistów (2 pokolenie) | Ale  | Slant | 400 ml | Fermentum Mobile |

### Extras

| Type        | Name                             | Amount | Use for | Time   |
|-------------|----------------------------------|--------|---------|--------|
| Water Agent | Kwas fosforowy 75% (wystadzanie) | 2 g    | Mash    | 60 min |
| Water Agent | Chlorek wapnia                   | 4 g    | Mash    | 60 min |
| Water Agent | Gips                             | 4 g    | Mash    | 60 min |
| Fining      | Mech irlandzki                   | 2 g    | Boil    | 15 min |
| Other       | siarczan cynku                   | 2 g    | Boil    | 0 min  |

### Notes

- <https://www.brewersfriend.com/mash-chemistry-and-brewing-water-calculator/?id=T0XZZXQ>  
 Ca+2 Mg+2 Na+ Cl- SO4-2 HCO  
 57.8 0.0 131.0 74.1 90.8 38.767  
 Mash pH \*: 5.46  
 SO42-/Cl- ratio: 1.2 Balanced  
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