

# Herbal Pale Ale #1 - Browar na Wyżynie

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **19**
- SRM **7.3**

## Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **6 %**
- Size with trub loss **20.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **11 %/h**
- Boil size **22.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **67 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **13.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **45 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **13.5 liter(s)** of **76C** water or to achieve **22.5 liter(s)** of wort

## Fermentables

| Type  | Name                             | Amount         | Yield | EBC |
|-------|----------------------------------|----------------|-------|-----|
| Grain | pale ale Viking Malt             | 3 kg (66.7%)   | 79 %  | 8   |
| Grain | monachijski typ II Viking Malt   | 0.5 kg (11.1%) | 78 %  | 24  |
| Grain | pszeniczny karmelowy Viking Malt | 0.2 kg (4.4%)  | 70 %  | 100 |
| Grain | pszeniczny Viking Malt           | 0.2 kg (4.4%)  | 84 %  | 5   |
| Grain | płatki owsiane błyskawiczne      | 0.6 kg (13.3%) | 50 %  | 3   |

## Hops

| Use for             | Name                     | Amount | Time   | Alpha acid |
|---------------------|--------------------------|--------|--------|------------|
| Boil                | Puławski (PL) - granulát | 10 g   | 60 min | 9.3 %      |
| Boil                | Puławski (PL) - granulát | 10 g   | 20 min | 9.3 %      |
| Aroma (end of boil) | Trawa żubrowa            | 15 g   | 0 min  | 1 %        |
| Aroma (end of boil) | Werbena cytrynowa        | 20 g   | 0 min  | 1 %        |
| Aroma (end of boil) | Owoce jałowca            | 15 g   | 0 min  | 1 %        |

## Yeasts

| Name | Type | Form  | Amount | Laboratory |
|------|------|-------|--------|------------|
| fm42 | Ale  | Slant | 500 ml | ---        |

## Extras

| Type        | Name                  | Amount  | Use for | Time   |
|-------------|-----------------------|---------|---------|--------|
| Water Agent | woda demineralizowana | 15000 g | Mash    | 70 min |
| Water Agent | kwas mlekowy 80%      | 4 g     | Mash    | 70 min |
| Fining      | mech irlandzki        | 4 g     | Boil    | 15 min |

## Notes

- Blend wody 50% demineralizowana 50% kranówka.

Profil wody:

Ca+2 Mg+2 Na+ Cl- SO4-2 HCO Alkalinity Residual

60.0 10.0 3.0 7.5 19.0 80.5 92.3 43.7

*Feb 7, 2018, 3:44 PM*

- Herbal Pale Ale 10 - 12 BLG  
*Feb 15, 2018, 11:02 PM*