

## #41 Włoski Pils

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **41**
- SRM **3.7**
- Style **Classic American Pilsner**

### Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **33 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **41.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.3 liter(s)**
- Total mash volume **31 liter(s)**

### Steps

- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **23.3 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **25.9 liter(s)** of **76C** water or to achieve **41.4 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount         | Yield  | EBC |
|-------|----------------------|----------------|--------|-----|
| Grain | Pilzneński           | 7 kg (90.3%)   | 81 %   | 4   |
| Grain | Acid Malt            | 0.5 kg (6.5%)  | 58.7 % | 6   |
| Grain | Weyermann - Carapils | 0.25 kg (3.2%) | 78 %   | 4   |

### Hops

| Use for             | Name    | Amount | Time     | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil                | lunga   | 50 g   | 30 min   | 11 %       |
| Aroma (end of boil) | Saaz    | 100 g  | 10 min   | 4.38 %     |
| Whirlpool           | Saaz    | 50 g   | 0 min    | 4.38 %     |
| w 90. stopniach     |         |        |          |            |
| Dry Hop             | Cascade | 100 g  | 2 day(s) | 5.4 %      |

### Yeasts

| Name             | Type  | Form | Amount | Laboratory |
|------------------|-------|------|--------|------------|
| Saflager W 34/70 | Lager | Dry  | 35 g   | Fermentis  |

### Extras

| Type         | Name                         | Amount | Use for | Time  |
|--------------|------------------------------|--------|---------|-------|
| Water Agent  | Gips piwowarski              | 7 g    | Mash    | 0 min |
| 1,8 łyżeczki |                              |        |         |       |
| Water Agent  | Sól                          | 2 g    | Mash    | 0 min |
| 0,3 łyżeczki |                              |        |         |       |
| Water Agent  | Calcium Chloride (dihydrate) | 4 g    | Mash    | 0 min |
| 0,9 łyżeczki |                              |        |         |       |

## Notes

- Przepis z "Piwowara". Woda w 100% Żywiecki Kryształ, modyfikowana dodatkami jak w przepisie powyżej.

Start fermentacji 10 stopni. Po 24h podniesienie temperatury do 11.

*Apr 3, 2021, 10:02 AM*