

#97 Trzecie zwykłe piwo

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **39**
- SRM **3.4**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **6 %**
- Size with trub loss **21.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **6 %/h**
- Boil size **22.9 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.25 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **17.6 liter(s)**

Steps

- Temp **52 C**, Time **5 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **20 min**
- Temp **75.6 C**, Time **1 min**

Mash step by step

- Heat up **13.5 liter(s)** of strike water to **56.9C**
- Add grains
- Keep mash **5 min** at **52C**
- Keep mash **30 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **75.6C**
- Sparge using **13.6 liter(s)** of **76C** water or to achieve **22.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|--------|-----|
| Grain | Viking Pilsner malt | 3.6 kg (86.7%) | 82 % | 4 |
| Grain | Weyermann - Carapils | 0.4 kg (9.6%) | 78 % | 4 |
| Grain | Acid Malt | 0.15 kg (3.6%) | 58.7 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------------------|--------|--------|------------|
| Boil | Tradition PL 2019 | 50 g | 60 min | 5.5 % |
| Aroma (end of boil) | Tettnanger DE 2019 | 25 g | 15 min | 3.7 % |
| Aroma (end of boil) | Tettnanger DE 2019 | 25 g | 1 min | 3.7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------|------|-------|--------|------------------|
| FM42 Stare Nadreńskie | Ale | Slant | 60 ml | Fermentum Mobile |