

LAB. #003 Pils

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **34**
- SRM **4.7**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.6 liter(s)**
- Total mash volume **8.8 liter(s)**

Steps

- Temp **66 C**, Time **50 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **6.6 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **50 min** at **66C**
- Keep mash **10 min** at **76C**
- Sparge using **8.3 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 1.8 kg (81.8%) | 80 % | 4 |
| Grain | Caramunich® typ I | 0.1 kg (4.5%) | 73 % | 80 |
| Grain | Pszenica prażona | 0.3 kg (13.6%) | 70 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Marynka | 8 g | 60 min | 10 % |
| Boil | Simcoe | 10 g | 15 min | 13.2 % |
| Boil | Simcoe | 10 g | 1 min | 13.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 200 ml | Safale |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------------|--------|---------|--------|
| Spice | Trawa cytrynowa | 12 g | Boil | 10 min |
| Fining | Mech irlandzki | 5 g | Boil | 15 min |