

21. PILS

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **45**
- SRM **3.9**
- 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 **13.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.8 liter(s)**
- Total mash volume **9 liter(s)**

Steps

- Temp **65 C**, Time **50 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **6.8 liter(s)** of strike water to **72.4C**
- Add grains
- Keep mash **50 min** at **65C**
- Keep mash **10 min** at **72C**
- Sparge using **8.7 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------|-----------------|-------|-----|
| Grain | Pilzneński | 2 kg (88.9%) | 81 % | 4 |
| Grain | Monachijski | 0.25 kg (11.1%) | 80 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil | Hallertau | 25 g | 50 min | 4.5 % |
| Boil | Hallertau | 32 g | 25 min | 4.5 % |