

Pilzner

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **35**
- SRM **4.5**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

Mash information

- Mash efficiency **67 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **22 liter(s)**
- Total mash volume **27.5 liter(s)**

Steps

- Temp **55 C**, Time **10 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **22 liter(s)** of strike water to **59.4C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **9.2 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------|---------------|-------|-----|
| Grain | Pilzneński | 5 kg (90.9%) | 81 % | 4 |
| Grain | Monachijski | 0.5 kg (9.1%) | 80 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------------------------|--------|----------|------------|
| Boil | hallertauer taurus | 15.5 g | 60 min | 15.5 % |
| Boil | Tettnanger | 25 g | 10 min | 3.8 % |
| Boil | Hellertau Hersbrucker | 25 g | 10 min | 4.3 % |
| Dry Hop | Tettnanger | 25 g | 2 day(s) | 3.8 % |
| Dry Hop | Hellertau Hersbrucker | 25 g | 2 day(s) | 4.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------------|-------|--------|---------|------------|
| Wyeast 2308 Munich Lager | Lager | Liquid | 2000 ml | Wyeast |

Extras

| Type | Name | Amount | Use for | Time |
|-------|-----------|--------|---------|--------|
| Spice | Whirflock | 2 g | Boil | 15 min |