

Czeski pils

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **37**
- SRM **3.3**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **45 liter(s)**
- Trub loss **5 %**
- Size with trub loss **49.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **59.4 liter(s)**

Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **32.3 liter(s)**
- Total mash volume **42.1 liter(s)**

Steps

- Temp **45 C**, Time **0 min**
- Temp **52 C**, Time **15 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **32.3 liter(s)** of strike water to **48.8C**
- Add grains
- Keep mash **0 min** at **45C**
- Keep mash **15 min** at **52C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Sparge using **36.9 liter(s)** of **76C** water or to achieve **59.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------|--------------|-------|-----|
| Grain | Pilzneński | 9 kg (92%) | 81 % | 4 |
| Grain | Cara-Pils/Dextrine | 0.79 kg (8%) | 72 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------------------|---------|--------|------------|
| Boil | Magnum | 56.25 g | 60 min | 11.7 % |
| Boil | Saaz (Czech Republic) | 45 g | 30 min | 3 % |
| Aroma (end of boil) | Saaz (Czech Republic) | 33.75 g | 0 min | 3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------|-------|-------|--------|------------|
| Saflager W 34/70 | Lager | Slant | 450 ml | Fermentis |