

# Czeski pils

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **29**
- SRM **3.7**
- Style **Classic American Pilsner**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **16.1 liter(s)**
- Total mash volume **20.7 liter(s)**

## Steps

- Temp **64 C**, Time **15 min**
- Temp **72 C**, Time **55 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **16.1 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **15 min** at **64C**
- Keep mash **55 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **11.3 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Pilzneński           | 4.3 kg (93.5%) | 81 %  | 4   |
| Grain | Weyermann - Carapils | 0.3 kg (6.5%)  | 78 %  | 4   |

## Hops

| Use for             | Name                 | Amount | Time   | Alpha acid |
|---------------------|----------------------|--------|--------|------------|
| First Wort          | lunga                | 15 g   | 60 min | 11 %       |
| Aroma (end of boil) | Lublin (Lubelski) PH | 50 g   | 5 min  | 5.3 %      |

## Yeasts

| Name                               | Type  | Form | Amount | Laboratory |
|------------------------------------|-------|------|--------|------------|
| Mangrove Jack's M84 Bohemian Lager | Lager | Dry  | 22 g   | Jacki      |

## Extras

| Type        | Name  | Amount | Use for | Time   |
|-------------|-------|--------|---------|--------|
| Water Agent | NaCl  | 7 g    | Boil    | 60 min |
| Water Agent | H3PO4 | 5 g    | Mash    | 90 min |

|             |          |     |      |        |
|-------------|----------|-----|------|--------|
| Water Agent | Whirfloc | 2 g | Boil | 10 min |
|-------------|----------|-----|------|--------|