

# pilsner

- Gravity **13.6 BLG**
- ABV ---
- IBU **30**
- SRM **4.3**
- Style **Bohemian Pilsener**

## Batch size

- Expected quantity of finished beer **45 liter(s)**
- Trub loss **5 %**
- Size with trub loss **47.3 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **58.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **33 liter(s)**
- Total mash volume **44 liter(s)**

## Steps

- Temp **69 C**, Time **70 min**

## Mash step by step

- Heat up **33 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **70 min** at **69C**
- Sparge using **36.5 liter(s)** of **76C** water or to achieve **58.5 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount        | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Malteurop Pilzneński | 10 kg (90.9%) | 82 %  | 4   |
| Grain | Weyermann - Carapils | 1 kg (9.1%)   | 78 %  | 4   |

## Hops

| Use for   | Name                  | Amount | Time   | Alpha acid |
|-----------|-----------------------|--------|--------|------------|
| Boil      | Marynka               | 15 g   | 90 min | 9 %        |
| Boil      | Saaz (Czech Republic) | 15 g   | 90 min | 4 %        |
| Boil      | Marynka               | 15 g   | 60 min | 9 %        |
| Boil      | Saaz (Czech Republic) | 15 g   | 60 min | 4 %        |
| Boil      | Saaz (Czech Republic) | 50 g   | 20 min | 4 %        |
| Boil      | Saaz (Czech Republic) | 50 g   | 5 min  | 4 %        |
| Boil      | Saaz (Czech Republic) | 20 g   | 5 min  | 4 %        |
| Whirlpool | Saaz (Czech Republic) | 50 g   | 30 min | 4 %        |

## Yeasts

| Name                               | Type  | Form | Amount | Laboratory      |
|------------------------------------|-------|------|--------|-----------------|
| Mangrove Jack's M76 bavarian lager | Lager | Dry  | 10 g   | Mangrove Jack's |
| Mangrove Jack's M76 bavarian lager | Lager | Dry  | 10 g   | Mangrove Jack's |

### Extras

| Type   | Name       | Amount | Use for | Time   |
|--------|------------|--------|---------|--------|
| Fining | Irish Moss | 10 g   | Boil    | 15 min |