

# Pils Perle

- Gravity **12.4 BLG**
- ABV ---
- IBU **31**
- SRM **6.5**
- Style **Bohemian Pilsener**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.4 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **40 min**

## Mash step by step

- Heat up **16.8 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **60 min** at **65C**
- Keep mash **40 min** at **72C**
- Sparge using **20.5 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount        | Yield | EBC |
|-------|----------------------------|---------------|-------|-----|
| Grain | Pilzneński                 | 4 kg (71.4%)  | 81 %  | 4   |
| Grain | Strzegom Karmel 30         | 0.5 kg (8.9%) | 75 %  | 30  |
| Grain | strzegom zakwaszający      | 0.1 kg (1.8%) | --- % | --- |
| Grain | Strzegom Wiedeński         | 0.5 kg (8.9%) | 79 %  | 10  |
| Grain | Strzegom Monachijski typ I | 0.5 kg (8.9%) | 79 %  | 16  |

## Hops

| Use for   | Name   | Amount | Time   | Alpha acid |
|-----------|--------|--------|--------|------------|
| Boil      | Magnum | 20 g   | 60 min | 13 %       |
| Boil      | Perle  | 25 g   | 20 min | 4 %        |
| Whirlpool | Perle  | 25 g   | 0 min  | 4 %        |

## Yeasts

| Name                 | Type  | Form   | Amount | Laboratory       |
|----------------------|-------|--------|--------|------------------|
| FM31 Bawarska Dolina | Lager | Liquid | 200 ml | Fermentum Mobile |