

# Pils

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **33**
- SRM **3.8**
- Style **Bohemian Pilsener**

## Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **10 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.1 liter(s)**

## Mash information

- Mash efficiency **73 %**
- Liquor-to-grist ratio **4.3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **24.4 liter(s)**

## Steps

- Temp **50 C**, Time **1 min**
- Temp **66 C**, Time **55 min**
- Temp **72 C**, Time **5 min**

## Mash step by step

- Heat up **19.8 liter(s)** of strike water to **53.5C**
- Add grains
- Keep mash **1 min** at **50C**
- Keep mash **55 min** at **66C**
- Keep mash **5 min** at **72C**
- Sparge using **9.9 liter(s)** of **76C** water or to achieve **25.1 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Pilzneński                 | 4.2 kg (91.3%) | 78 %  | 3.5 |
| Grain | Strzegom Monachijski typ I | 0.4 kg (8.7%)  | 79 %  | 16  |

## Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil                | lunga             | 20 g   | 60 min | 11 %       |
| Aroma (end of boil) | Lublin (Lubelski) | 50 g   | 5 min  | 4 %        |
| Aroma (end of boil) | Mittelfruh        | 30 g   | 5 min  | 4.3 %      |
| Aroma (end of boil) | Lublin (Lubelski) | 50 g   | 0 min  | 4 %        |
| Aroma (end of boil) | Sybilla           | 25 g   | 0 min  | 5 %        |

## Yeasts

| Name                     | Type  | Form  | Amount | Laboratory       |
|--------------------------|-------|-------|--------|------------------|
| Wyeast 2308 Munich Lager | Lager | Slant | 380 ml | Fermentum Mobile |