

# pils

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **51**
- SRM **4.4**
- Style **Classic American Pilsner**

## 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 **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **55 C**, Time **10 min**
- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **40 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **72C**
- Sparge using **19.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount       | Yield | EBC |
|-------|----------------------------|--------------|-------|-----|
| Grain | Strzegom Pilzneński        | 5 kg (83.3%) | 80 %  | 4   |
| Grain | Strzegom Monachijski typ I | 1 kg (16.7%) | 79 %  | 16  |

## Hops

| Use for             | Name   | Amount | Time     | Alpha acid |
|---------------------|--------|--------|----------|------------|
| Boil                | lunga  | 35 g   | 60 min   | 11 %       |
| Aroma (end of boil) | Simcoe | 40 g   | 5 min    | 13.2 %     |
| Whirlpool           | Simcoe | 60 g   | 5 min    | 13.2 %     |
| Dry Hop             | Citra  | 50 g   | 3 day(s) | 12 %       |

## Yeasts

| Name           | Type  | Form | Amount | Laboratory |
|----------------|-------|------|--------|------------|
| Brewferm Lager | Lager | Dry  | 12 g   | brewferm   |