

# Polski Pils

- Gravity **12.6 BLG**
- ABV ---
- IBU **26**
- SRM **4.2**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26 liter(s)**

## Mash information

- Mash efficiency **86 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.3 liter(s)**
- Total mash volume **16.4 liter(s)**

## Steps

- Temp **55 C**, Time **10 min**
- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **20 min**

## Mash step by step

- Heat up **12.3 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **20 min** at **76C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **26 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński        | 3.5 kg (85.4%) | 80 %  | 4   |
| Grain | Strzegom Monachijski typ I | 0.4 kg (9.8%)  | 79 %  | 16  |
| Grain | Carahell                   | 0.2 kg (4.9%)  | 77 %  | 26  |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Marynka | 20 g   | 60 min | 10 %       |
| Boil    | Marynka | 10 g   | 5 min  | 10 %       |

## Yeasts

| Name   | Type  | Form | Amount | Laboratory |
|--------|-------|------|--------|------------|
| W34/70 | Lager | Dry  | 11.5 g | ---        |