

## Polski Pils

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **21**
- SRM **3.5**

### Batch size

- Expected quantity of finished beer **27.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **28.9 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **35.6 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.8 liter(s)**
- Total mash volume **25 liter(s)**

### Steps

- Temp **55 C**, Time **5 min**
- Temp **64 C**, Time **15 min**
- Temp **72 C**, Time **45 min**

### Mash step by step

- Heat up **18.8 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **15 min** at **64C**
- Keep mash **45 min** at **72C**
- Sparge using **23.1 liter(s)** of **76C** water or to achieve **35.6 liter(s)** of wort

### Fermentables

| Type  | Name                   | Amount         | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński    | 6 kg (96%)     | 80 %  | 4   |
| Grain | CaramelPils Bestmalz   | 0.2 kg (3.2%)  | 80 %  | 4   |
| Grain | Zakwaszający Weyermann | 0.05 kg (0.8%) | 80 %  | 4   |

### Hops

| Use for             | Name     | Amount | Time   | Alpha acid |
|---------------------|----------|--------|--------|------------|
| Boil                | Marynka  | 25 g   | 60 min | 8.8 %      |
| Aroma (end of boil) | Lubelski | 50 g   | 5 min  | 3.5 %      |

### Yeasts

| Name            | Type  | Form | Amount | Laboratory |
|-----------------|-------|------|--------|------------|
| Saflager W34/70 | Lager | Dry  | 23 g   | Fermentis  |