

Polski Pils

- Gravity **17.5 BLG**
- ABV **7.5 %**
- IBU **30**
- SRM **4.4**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.2 liter(s)**
- Total mash volume **17.6 liter(s)**

Steps

- Temp **63 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **13.2 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **10 min** at **76C**
- Sparge using **7 liter(s)** of **76C** water or to achieve **15.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------|---------------|-------|-----|
| Grain | Pilzneński | 4 kg (90.9%) | 81 % | 4 |
| Grain | Płatki ryżowe | 0.4 kg (9.1%) | --- % | --- |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|----------|--------|----------|------------|
| Boil | Książęcy | 15 g | 60 min | 7 % |
| Boil | Książęcy | 15 g | 60 min | 7 % |
| Whirlpool | Książęcy | 10 g | 0 min | 7 % |
| Dry Hop | Książęcy | 10 g | 3 day(s) | 7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------|-------|------|--------|------------|
| W34/70 | Lager | Dry | 11 g | --- |