

pils

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **34**
- SRM **3.7**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **25.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **65 C**, Time **15 min**
- Temp **75 C**, Time **45 min**
- Temp **79 C**, Time **5 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **15 min** at **65C**
- Keep mash **45 min** at **75C**
- Keep mash **5 min** at **79C**
- Sparge using **15.9 liter(s)** of **76C** water or to achieve **25.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------|-------------|-------|-----|
| Grain | Pilzneński | 5 kg (100%) | 81 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 30 g | 60 min | 4 % |
| Boil | Marynka | 25 g | 30 min | 10 % |
| Boil | Marynka | 25 g | 0 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------------------------|-------|-------|--------|--------------|
| Gozdawa - W35 German Lager | Lager | Slant | 200 ml | gęstwa słoik |