

jasne pełne

- Gravity **12.1 BLG**
- ABV ---
- IBU **36**
- SRM **4.2**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **50.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **33.6 liter(s)**

Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **24 liter(s)** of strike water to **71.6C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **36.2 liter(s)** of **76C** water or to achieve **50.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Eraclea pisner weyerman | 3.5 kg (36.5%) | 80 % | 3 |
| Grain | Strzegom Pilzneński | 4.5 kg (46.9%) | 80 % | 4 |
| Grain | Strzegom Monachijski typ I | 1.5 kg (15.6%) | 79 % | 16 |
| Grain | Strzegom Pszeniczny | 0.1 kg (1%) | 81 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil | Ariana | 30 g | 60 min | 11.7 % |
| Boil | Ariana | 50 g | 15 min | 11.7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale | Slant | 300 ml | Fermentis |