

Jasne

- Gravity **8.8 BLG**
- ABV **3.4 %**
- IBU **25**
- SRM **4.1**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **55 liter(s)**
- Trub loss **5 %**
- Size with trub loss **57.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **69.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **28.5 liter(s)**
- Total mash volume **38 liter(s)**

Steps

- Temp **64 C**, Time **15 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **28.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **15 min** at **64C**
- Keep mash **45 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **50.6 liter(s)** of **76C** water or to achieve **69.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 7 kg (73.7%) | 80 % | 4 |
| Grain | Strzegom Monachijski typ II | 2 kg (21.1%) | 79 % | 22 |
| Grain | Caramel pale | 0.25 kg (2.6%) | 70 % | 7 |
| Grain | Weyermann pszeniczny jasny | 0.25 kg (2.6%) | 80 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil | Marynka | 55 g | 60 min | 8.8 % |
| Boil | Saaz (Czech Republic) | 50 g | 5 min | 4 % |
| Boil | Styrian Golding | 25 g | 5 min | 4 % |