

Czas

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **25**
- SRM **7.1**
- Style **Vienna Lager**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

Steps

- Temp **66 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **70 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **14.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Monachijski | 1.5 kg (28.3%) | 80 % | 6 |
| Grain | Strzegom Wiedeński | 1.5 kg (28.3%) | 79 % | 12 |
| Grain | Pszeniczny | 0.5 kg (9.4%) | 85 % | 4 |
| Grain | Viking melanoidynowy | 0.3 kg (5.7%) | 75 % | 80 |
| Grain | Briess - Pale Ale Malt | 0.5 kg (9.4%) | 80 % | 14 |
| Grain | Pilzński | 1 kg (18.9%) | 81 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil | Azacca | 13 g | 60 min | 14 % |
| Boil | Spalt | 30 g | 15 min | 4.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|-------|------|--------|------------|
| W34 | Lager | Dry | 22 g | --- |