

Opera Wiedeńska

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **27**
- SRM **15.9**
- 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 **75 %**
- Liquor-to-grist ratio **3.8 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **22.3 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **67 C**, Time **60 min**

Mash step by step

- Heat up **17.7 liter(s)** of strike water to **56.2C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **60 min** at **67C**
- Sparge using **12.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Pilzneński | 0.8 kg (17.2%) | 81 % | 4 |
| Grain | Strzegom Wiedeński | 3 kg (64.5%) | 79 % | 10 |
| Grain | Strzegom Monachijski typ I | 0.7 kg (15.1%) | 79 % | 16 |
| Grain | Strzegom Czekoladowy ciemny | 0.15 kg (3.2%) | 68 % | 1200 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Citra | 12 g | 60 min | 12 % |
| Boil | Marynka | 25 g | 10 min | 10 % |