

Wędzony koźlak

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **22**
- SRM **21.2**
- Style **Traditional Bock**

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 liter(s) / kg**
- Mash size **22.4 liter(s)**
- Total mash volume **29.9 liter(s)**

Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **40 min**

Mash step by step

- Heat up **22.4 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **40 min** at **72C**
- Sparge using **10.4 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|-----------------|-------|-----|
| Grain | Viking Wędzony bukiem | 3 kg (40.1%) | 82 % | 10 |
| Grain | Strzegom Monachijski typ II | 1.4 kg (18.7%) | 79 % | 22 |
| Grain | Strzegom Wiedeński | 1.84 kg (24.6%) | 79 % | 10 |
| Grain | Strzegom Karmel 150 | 0.64 kg (8.6%) | 75 % | 150 |
| Grain | Strzegom Karmel 600 | 0.24 kg (3.2%) | 68 % | 601 |
| Grain | Viking Melanoidynowy | 0.36 kg (4.8%) | 75 % | 60 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 50 g | 60 min | 5 % |