

Wędzony porter

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **40**
- SRM **26.3**
- Style **Robust Porter**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **10 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.8 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.4 liter(s)**
- Total mash volume **19.8 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **15.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Sparge using **8.8 liter(s)** of **76C** water or to achieve **19.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------------|----------------|--------|-----|
| Grain | Pilznieński | 1.5 kg (34.1%) | 81 % | 4 |
| Grain | Grodziski pszeniczny wędzony dębem | 2.4 kg (54.5%) | 80 % | 3 |
| Grain | Jęczmień palony | 0.3 kg (6.8%) | 55 % | 985 |
| Grain | Special B Malt | 0.2 kg (4.5%) | 65.2 % | 315 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil | Cascade PL | 30 g | 60 min | 7.8 % |
| Boil | Cascade PL | 20 g | 10 min | 7.8 % |