

Rye Porter

- Gravity **20.7 BLG**
- ABV **9.2 %**
- IBU **44**
- SRM **34.4**
- Style **Baltic Porter**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **120 min**
- Evaporation rate **20 %/h**
- Boil size **17.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **18.8 liter(s)**
- Total mash volume **23.5 liter(s)**

Steps

- Temp **52 C**, Time **40 min**
- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **18.8 liter(s)** of strike water to **56C**
- Add grains
- Keep mash **40 min** at **52C**
- Keep mash **45 min** at **66C**
- Keep mash **20 min** at **72C**
- Sparge using **3.7 liter(s)** of **76C** water or to achieve **17.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------------|----------------|--------|------|
| Grain | Weyermann - Bohemian Pilsner Malt | 3 kg (63.8%) | 81 % | 4 |
| Grain | Rye, Flaked | 0.7 kg (14.9%) | 78.3 % | 4 |
| Grain | Caraaroma | 0.25 kg (5.3%) | 78 % | 400 |
| Grain | Abbey Castle | 0.25 kg (5.3%) | 80 % | 45 |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.25 kg (5.3%) | 73 % | 1001 |
| Grain | Biscuit Malt | 0.25 kg (5.3%) | 79 % | 45 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|---------|------------|
| Boil | lunga | 15 g | 120 min | 10.9 % |
| Boil | Zula | 15 g | 15 min | 8.8 % |
| Boil | Książęcy | 15 g | 15 min | 8.3 % |