

Borter Pałtycki 3

- Gravity **20.2 BLG**
- ABV **8.9 %**
- IBU **27**
- SRM **36.7**
- 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 **15 %/h**
- Boil size **16.5 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.1 liter(s)**
- Total mash volume **24.5 liter(s)**

Steps

- Temp **62 C**, Time **35 min**
- Temp **72 C**, Time **35 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **19.1 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **35 min** at **62C**
- Keep mash **35 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **2.9 liter(s)** of **76C** water or to achieve **16.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------------|----------------|--------|------|
| Grain | castle - Vienna Malt | 3.7 kg (67.9%) | 77.5 % | 7 |
| Grain | Carafa special III 1300-1500 | 0.25 kg (4.6%) | 70 % | 1400 |
| Grain | red ale viking malt | 0.5 kg (9.2%) | 75 % | 70 |
| Grain | castle- Light Munich Malt | 1 kg (18.3%) | 82 % | 14 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Marynka | 20 g | 60 min | 7.5 % |
| Aroma (end of boil) | Marynka | 20 g | 5 min | 7.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------|-------|-------|--------|------------|
| wyeast munich lager | Lager | Slant | 600 ml | --- |