

## 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	---