Borter Pałtycki

- Gravity **20 BLG**
- ABV **8.8 %**
- IBU **36**
- SRM **33.7**
- Style **Baltic Porter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **120 min**
- Evaporation rate **15 %/h**
- Boil size **29.9 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.7 liter(s)**
- Total mash volume **31.6 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **23.7 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **29.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	5 kg *(63.4%)*	79 %	10
Grain	Strzegom Monachijski typ I	1.5 kg *(19%)*	79 %	16
Grain	Carafa special III 1300-1500	0.25 kg *(3.2%)*	70 %	1400
Grain	Strzegom Karmel 300	0.18 kg *(2.3%)*	68 %	601
Grain	caramel sweet viking malt	0.8 kg *(10.1%)*	75 %	64
Grain	Strzegom Karmel 600	0.16 kg *(2%)*	68 %	601

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	30 g	60 min	12.6 %
Aroma (end of boil)	Sybilla	25 g	10 min	6.9 %

Yeasts

Name	Type	Form	Amount	Laboratory
saflager S-23	Lager	Slant	600 ml	---