

Porter

- Gravity **26.8 BLG**
- ABV **12.7 %**
- IBU **20**
- SRM **38.1**
- Style **Baltic Porter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.3 liter(s) / kg**
- Mash size **27.1 liter(s)**
- Total mash volume **38.9 liter(s)**

Steps

- Temp **55 C**, Time **20 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **27.1 liter(s)** of strike water to **62.6C**
- Add grains
- Keep mash **20 min** at **55C**
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **11.1 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	4 kg (33.9%)	81 %	5
Grain	Weyermann - Pale Ale Malt	2 kg (16.9%)	85 %	7
Grain	Płatki żytnie	1 kg (8.5%)	60 %	3
Grain	Strzegom Karmel 600	0.3 kg (2.5%)	68 %	601
Grain	Strzegom Czekoladowy ciemny	0.5 kg (4.2%)	68 %	1200
Grain	Pszeniczny	2 kg (16.9%)	85 %	4
Grain	Strzegom Wiedeński	2 kg (16.9%)	79 %	10

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lubelski	60 g	60 min	3.5 %
Boil	Lublin (Lubelski)	40 g	40 min	3.5 %