

Porter

- Gravity **21.1 BLG**
- ABV **9.4 %**
- IBU **29**
- SRM **31.5**
- 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 **10 %/h**
- Boil size **27.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **22 liter(s)**
- Total mash volume **30.8 liter(s)**

Steps

- Temp **68 C**, Time **90 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **22 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **14.4 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (56.8%)	80 %	5
Grain	Strzegom Monachijski typ I	0.9 kg (10.2%)	79 %	16
Grain	Strzegom Monachijski typ II	0.9 kg (10.2%)	79 %	22
Grain	Słód Caramunich Typ II Weyermann	0.9 kg (10.2%)	73 %	120
Grain	Caraaroma	0.7 kg (8%)	78 %	400
Grain	Brown Malt (British Chocolate)	0.3 kg (3.4%)	70 %	128
Grain	Strzegom Barwiący	0.1 kg (1.1%)	68 %	1300

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %
Boil	Lublin (Lubelski)	30 g	20 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
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FM31 Bawarska Dolina	Lager	Slant	340 ml	Fermentum Mobile
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