

## Porter Ale (lekko wędzony)

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **34**
- SRM **34.5**
- Style **Robust Porter**

### Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **34.3 liter(s)**

### Mash information

- Mash efficiency **98 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27.4 liter(s)**

### Steps

- Temp **68 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **21 liter(s)** of strike water to **75.3C**
- Add grains
- Keep mash **50 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **19.7 liter(s)** of **76C** water or to achieve **34.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Wędzony bukiem Viking Malt	2 kg (31.4%)	82 %	10
Grain	Viking Pale Ale malt	1.5 kg (23.6%)	80 %	5
Grain	Strzegom Czekoladowy jasny	0.245 kg (3.8%)	68 %	400
Grain	Strzegom Czekoladowy ciemny	0.67 kg (10.5%)	68 %	1200
Grain	Viking melanoidynowy	0.25 kg (3.9%)	75 %	60
Grain	Pszeniczny	0.5 kg (7.9%)	85 %	4
Grain	Płatki owsiane	0.8 kg (12.6%)	85 %	3
Grain	Strzegom Karmel 30	0.4 kg (6.3%)	75 %	30

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	50 g	30 min	3 %
Boil	Marynka	35 g	60 min	10 %

### Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
US-5	Ale	Dry	11.5 g	---

### **Extras**

<b>Type</b>	<b>Name</b>	<b>Amount</b>	<b>Use for</b>	<b>Time</b>
Spice	Curacao	7 g	Boil	5 min
Fining	Mech Irladzki	10 g	Boil	15 min