

# Porter

- Gravity **21.3 BLG**
- ABV **9.5 %**
- IBU **34**
- SRM **39.4**
- Style **Baltic Porter**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **24.7 liter(s)**
- Total mash volume **31.7 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **24.7 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **2.2 liter(s)** of **76C** water or to achieve **19.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (56.7%)	80 %	4
Grain	Strzegom Wiedeński	1 kg (14.2%)	79 %	10
Grain	Strzegom Monachijski typ I	1 kg (14.2%)	79 %	16
Grain	Strzegom Karmel 300	0.5 kg (7.1%)	70 %	299
Grain	Strzegom Czekoladowy ciemny	0.25 kg (3.5%)	68 %	1200
Grain	Jęczmień palony	0.1 kg (1.4%)	55 %	985
Grain	Strzegom Czekoladowy jasny	0.2 kg (2.8%)	68 %	400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %
Boil	Lublin (Lubelski)	20 g	15 min	4 %

## Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
w34/70	Lager	Slant	500 ml	mj