

## LAB. #001 Imperialny Porter Bałtycki

- Gravity **25.7 BLG**
- ABV **12.1 %**
- IBU **81**
- SRM **37.6**
- Style **Baltic Porter**

### Batch size

- Expected quantity of finished beer **160 liter(s)**
- Trub loss **5 %**
- Size with trub loss **168 liter(s)**
- Boil time **120 min**
- Evaporation rate **10 %/h**
- Boil size **220.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **202.5 liter(s)**
- Total mash volume **283.5 liter(s)**

### Steps

- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **50 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **202.5 liter(s)** of strike water to **70.4C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **50 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **99.3 liter(s)** of **76C** water or to achieve **220.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski	45 kg (52.9%)	80 %	16
Grain	Strzegom Wiedeński	16 kg (18.8%)	79 %	10
Grain	Biscuit Malt	8 kg (9.4%)	79 %	45
Grain	Caramunich® typ I	4 kg (4.7%)	73 %	80
Grain	Pszenica prażona	4 kg (4.7%)	70 %	3
Grain	Strzegom Czekoladowy ciemny	4 kg (4.7%)	68 %	1200
dodać 10minut przed końcem zacierania				
Sugar	Cukier trzcinowy Muscovado	4 kg (4.7%)	--- %	---
dodać na 15min przed końcem gotowania				

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	600 g	60 min	15.5 %
Boil	Hersbrucker	400 g	20 min	3 %

### Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
Wyeast - Bohemian Lager	Lager	Slant	1000 ml	Wyeast Labs