

## Mój pierwszy raz

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- Gravity **15.9 BLG**
- ABV ---
- IBU **34**
- SRM **39.4**
- Style **Oatmeal Stout**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.2 liter(s)**
- Total mash volume **23.4 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **18.2 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **12.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3.55 kg (62.3%)	85 %	7
Grain	Chocolate Malt (UK)	0.35 kg (6.1%)	73 %	887
Grain	Caramunich Malt	0.3 kg (5.3%)	71.7 %	110
Grain	Biscuit Malt	0.2 kg (3.5%)	79 %	45
Grain	Carafa	0.2 kg (3.5%)	70 %	664
Sugar	Milk Sugar (Lactose)	0.5 kg (8.8%)	76.1 %	0
Grain	Barley, Flaked	0.3 kg (5.3%)	70 %	4
Grain	Oats, Flaked	0.3 kg (5.3%)	80 %	2

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Target	28 g	60 min	10.5 %
Aroma (end of boil)	Fuggles	25 g	10 min	4.5 %
Dry Hop	Target	12 g	14 day(s)	10.5 %
Dry Hop	Fuggles	15 g	14 day(s)	4.5 %

### Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
Safale S-04	Ale	Dry	11.5 g	Safale

### **Extras**

<b>Type</b>	<b>Name</b>	<b>Amount</b>	<b>Use for</b>	<b>Time</b>
Spice	Vanilla stick	6 g	Boil	10 min
Spice	Vanilla stick	6 g	Secondary	14 day(s)