

## Mój pierwszy raz

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- Gravity **27.4 BLG**
- ABV ---
- IBU **57**
- SRM **86.7**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **21.9 liter(s)**
- Total mash volume **32.9 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**

### Mash step by step

- Heat up **21.9 liter(s)** of strike water to **80C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **14.4 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	8 kg (73.1%)	79 %	6
Grain	Strzegom Karmel 600	0.5 kg (4.6%)	68 %	601
Grain	Strzegom Czekoladowy 400	1 kg (9.1%)	68 %	400
Grain	Strzegom Czekoladowy ciemny	0.5 kg (4.6%)	68 %	1200
Grain	Strzegom Barwiący	0.15 kg (1.4%)	68 %	1300
Grain	Oats, Flaked	0.8 kg (7.3%)	80 %	2

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Bullion	50 g	60 min	7.75 %
Boil	Sticklebract	50 g	30 min	12 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M03 UK Dark Ale	Ale	Dry	10 g	Mangrove Jack's