

## ris 2

- Gravity **22.7 BLG**
- ABV ---
- IBU **9**
- SRM **56.9**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **9 liter(s)**
- Trub loss **5 %**
- Size with trub loss **9.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **11.9 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.5 liter(s)**
- Total mash volume **15.3 liter(s)**

### Steps

- Temp **68 C**, Time **90 min**

### Mash step by step

- Heat up **11.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **90 min** at **68C**
- Sparge using **4.2 liter(s)** of **76C** water or to achieve **11.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	0.6 kg (14.9%)	80 %	7
Grain	Strzegom Monachijski typ I	2 kg (49.8%)	79 %	16
Grain	Słód Crystal 160	0.12 kg (3%)	73.5 %	160
Grain	castlemelting black	0.15 kg (3.7%)	72 %	1350
Grain	Strzegom Karmel 600	0.1 kg (2.5%)	68 %	601
Sugar	cukier brazowy	0.2 kg (5%)	--- %	---
Grain	Weyermann - Carafa I	0.1 kg (2.5%)	70 %	690
Grain	Strzegom Pilzneński	0.5 kg (12.4%)	80 %	4
Grain	Weyermann - Carafa II	0.15 kg (3.7%)	70 %	837
Grain	Strzegom Czekoladowy ciemny	0.1 kg (2.5%)	68 %	1200

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	10 g	30 min	4 %
Boil	Lublin (Lubelski)	10 g	15 min	4 %
Boil	Lublin (Lubelski)	5 g	5 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	5 g	Fermentis