

## RIS 09.02

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- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **37**
- SRM **85.1**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **15.9 liter(s)**

### Mash information

- Mash efficiency **15 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **36 liter(s)**
- Total mash volume **50.4 liter(s)**

### Steps

- Temp **69 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **36 liter(s)** of strike water to **78.8C**
- Add grains
- Keep mash **60 min** at **69C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **-5.7 liter(s)** of **76C** water or to achieve **15.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.5 kg (31.3%)	81 %	4
Grain	Strzegom Monachijski typ II	4.5 kg (31.3%)	79 %	22
Grain	Płatki owsiane	2 kg (13.9%)	85 %	3
Grain	Barley, Flaked	1 kg (6.9%)	70 %	4
Grain	Jęczmień palony	0.6 kg (4.2%)	55 %	985
Grain	Weyermann - Chocolate Wheat	0.6 kg (4.2%)	74 %	788
Grain	Simpsons - Coffee Malt	0.6 kg (4.2%)	74 %	500
Grain	Strzegom Karmel 150	0.6 kg (4.2%)	75 %	150

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnat	15 g	60 min	13.2 %