

## Ris\_2

- Gravity **23.8 BLG**
- ABV **10.9 %**
- IBU **77**
- SRM **58.3**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **8 %**
- Size with trub loss **16.2 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **21.2 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **20.3 liter(s)**
- Total mash volume **28.4 liter(s)**

### Steps

- Temp **68 C**, Time **90 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **2 min**

### Mash step by step

- Heat up **20.3 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **15 min** at **72C**
- Keep mash **2 min** at **76C**
- Sparge using **9 liter(s)** of **76C** water or to achieve **21.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	3.5 kg (43.2%)	81 %	6
Grain	Strzegom Monachijski typ II	2.5 kg (30.9%)	79 %	22
Grain	Płatki owsiane	0.5 kg (6.2%)	85 %	3
Grain	carafa special II	0.4 kg (4.9%)	55 %	1200
Grain	Jęczmień palony	0.25 kg (3.1%)	55 %	985
Grain	Black (Patent) Malt	0.2 kg (2.5%)	55 %	1200
Grain	Caraaroma	0.25 kg (3.1%)	78 %	400
Grain	Strzegom Karmel 150	0.5 kg (6.2%)	75 %	150

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	65 g	60 min	13.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Safale US-05	Ale	Slant	220 ml	Fermentis
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### Extras

Type	Name	Amount	Use for	Time
Spice	wanilia	20 g	Secondary	30 day(s)
Spice	kawa	200 g	Secondary	30 day(s)

### Notes

- 31.12- blg zeszło do 15, dodana kolejna porcja gęstwy us05 (ok. 100ml)  
1.02.12- 11blg  
23.02.19r.- zabutelkowany, zeszło do 7blg, 66g glukozy/11l piwa (2.2vCO2)  
*Jan 2, 2019, 7:46 PM*