

## 49# ris

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- Gravity **23.1 BLG**
- ABV **10.5 %**
- IBU **51**
- SRM **58.2**
- 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 **75 min**
- Evaporation rate **5 %/h**
- Boil size **22.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19 liter(s)**
- Total mash volume **25.4 liter(s)**

### Steps

- Temp **68 C**, Time **90 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **19 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **10.1 liter(s)** of **76C** water or to achieve **22.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	3.85 kg (47.8%)	80 %	7
Grain	Monachijski	1.2 kg (14.9%)	80 %	16
Grain	Caramel/Crystal Malt - 120L	0.3 kg (3.7%)	72 %	236
Grain	Strzegom Czekoladowy ciemny	0.2 kg (2.5%)	68 %	1200
Liquid Extract	Bruntal ekstrakt słodowy ciemny	1.7 kg (21.1%)	90 %	621
Grain	Płatki pszeniczne	0.8 kg (9.9%)	60 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	50 g	60 min	10 %
Boil	Lublin (Lubelski)	40 g	60 min	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	400 ml	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Flavor	płatki dębowe	50 g	Secondary	10 day(s)