

## ris

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- Gravity **28.1 BLG**
- ABV **13.6 %**
- IBU **85**
- SRM **44.5**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **27 liter(s)**
- Total mash volume **36 liter(s)**

### Steps

- Temp **67 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **27 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **90 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **1 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (55.6%)	80 %	5
Grain	Strzegom Karmel 300	0.5 kg (5.6%)	70 %	299
Grain	Płatki owsiane	1 kg (11.1%)	85 %	3
Grain	Strzegom Monachijski typ II	2 kg (22.2%)	79 %	22
Grain	Strzegom Czekoladowy 1200	0.25 kg (2.8%)	68 %	1202
Grain	Jęczmień palony	0.25 kg (2.8%)	55 %	985

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	100 g	60 min	10 %
Boil	Saaz (Czech Republic)	50 g	10 min	4.5 %