

## R.I.S.

- Gravity **22.5 BLG**
- ABV **10.2 %**
- IBU **97**
- SRM **66.9**
- 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 **90 min**
- Evaporation rate **10 %/h**
- Boil size **15.9 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **25.9 liter(s)**

### Steps

- Temp **66 C**, Time **75 min**
- Temp **77 C**, Time **15 min**

### Mash step by step

- Heat up **20.1 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **75 min** at **66C**
- Keep mash **15 min** at **77C**
- Sparge using **1.6 liter(s)** of **76C** water or to achieve **15.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3 kg (52.2%)	79 %	6
Grain	Monachijski	1 kg (17.4%)	80 %	16
Grain	Caraaroma	0.5 kg (8.7%)	78 %	400
Grain	Weyermann - Carawheat	0.25 kg (4.3%)	77 %	97
Grain	Carafa I	0.5 kg (8.7%)	70 %	690
Grain	Carafa III	0.5 kg (8.7%)	70 %	1034

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Nugget	35 g	90 min	13 %
Boil	Nugget	20 g	30 min	13 %
Aroma (end of boil)	Nugget	15 g	15 min	13 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M42 New World Strong Ale	Ale	Dry	10 g	Mangrove Jack's