

## RIS 2na3

- Gravity **26.4 BLG**
- ABV **12.5 %**
- IBU **149**
- SRM **108.6**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **13.8 liter(s)**

### Mash information

- Mash efficiency **45 %**
- Liquor-to-grist ratio **2.2 liter(s) / kg**
- Mash size **22.4 liter(s)**
- Total mash volume **32.6 liter(s)**

### Steps

- Temp **67 C**, Time **120 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **22.4 liter(s)** of strike water to **77.7C**
- Add grains
- Keep mash **120 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **1.6 liter(s)** of **76C** water or to achieve **13.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (49%)	79 %	6
Grain	Monachijski	2 kg (19.6%)	80 %	16
Grain	Słód Caraaroma®	1 kg (9.8%)	74 %	400
Grain	Słód Caramunich® typ II	0.5 kg (4.9%)	73 %	120
Grain	Słód Carafa® typ I	0.5 kg (4.9%)	65 %	900
Grain	Palone ziarno jęczmienia	1 kg (9.8%)	65 %	1000
Grain	Płatki owsiane	0.2 kg (2%)	1 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	106 g	90 min	8.8 %
Aroma (end of boil)	Lublin (Lubelski)	112 g	10 min	4 %
Aroma (end of boil)	Cascade	25 g	10 min	7.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale