

## RIS do dopracowania

- Gravity **23.6 BLG**
- ABV **10.8 %**
- IBU **70**
- SRM **59.1**
- 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 **60 min**
- Evaporation rate **12 %/h**
- Boil size **25.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **1.65 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **26.5 liter(s)**

### Steps

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

### Mash step by step

- Heat up **16.5 liter(s)** of strike water to **82.5C**
- Add grains
- Keep mash **90 min** at **68C**
- Sparge using **19.3 liter(s)** of **76C** water or to achieve **25.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4 kg (40%)	79 %	6
Grain	Wędzony bukiem Viking Malt	2 kg (20%)	82 %	10
Grain	Słód special X	1 kg (10%)	75 %	300
Grain	Strzegom Pszeniczny	1 kg (10%)	81 %	6
Grain	Słód Special B	0.5 kg (5%)	77 %	260
Grain	Chocolate (Anglia)	0.5 kg (5%)	72 %	1200
Grain	Kawowy	0.5 kg (5%)	72.5 %	450
Grain	Karmelowy Czerwony	0.5 kg (5%)	68 %	500

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Rubin	50 g	50 min	12 %
Boil	Sybilla	50 g	30 min	6 %
Boil	Styrian Eureka	50 g	10 min	9.9 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Liquid	1000 ml	Fermentum Mobile