

## RIS do przerobienia

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- Gravity **27.7 BLG**
- ABV **13.3 %**
- IBU **67**
- SRM **78.8**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.7 liter(s)**
- Boil time **180 min**
- Evaporation rate **12 %/h**
- Boil size **21.9 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **25.5 liter(s)**

### Steps

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

### Mash step by step

- Heat up **17 liter(s)** of strike water to **80C**
- Add grains
- Keep mash **90 min** at **68C**
- Sparge using **13.4 liter(s)** of **76C** water or to achieve **21.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3 kg (35.3%)	79 %	6
Grain	Wędzony bukiem Viking Malt	2 kg (23.5%)	82 %	10
Grain	Strzegom Pszeniczny	1 kg (11.8%)	81 %	6
Grain	Karmelowy Czerwony	0.5 kg (5.9%)	75 %	59
Grain	Płatki orkiszowe	0.5 kg (5.9%)	80 %	4
Grain	Jęczmień palony	1 kg (11.8%)	55 %	985
Grain	Strzegom Czekoladowy ciemny	0.5 kg (5.9%)	68 %	1200

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnat	50 g	60 min	11.2 %
Boil	Puławski	100 g	10 min	6 %

### Yeasts

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