

## wiRIS ver.2

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- Gravity **25.7 BLG**
- ABV **12.1 %**
- IBU **67**
- SRM **39.8**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **120 min**
- Evaporation rate **10 %/h**
- Boil size **28.8 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **27.2 liter(s)**
- Total mash volume **38.1 liter(s)**

### Steps

- Temp **68 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **27.2 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **12.5 liter(s)** of **76C** water or to achieve **28.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (45.9%)	80 %	5
Grain	Strzegom Monachijski typ II	3.5 kg (32.1%)	79 %	22
Grain	płatki jęczmienne	0.5 kg (4.6%)	80 %	5
Grain	Płatki owsiane	0.5 kg (4.6%)	60 %	3
Grain	Fawcett - Pszeniczny Czekoladowy	0.2 kg (1.8%)	73 %	1001
Grain	Jęczmień palony	0.5 kg (4.6%)	55 %	985
Grain	Strzegom Karmel 150	0.7 kg (6.4%)	75 %	150

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	50 g	120 min	13.5 %
Aroma (end of boil)	Magnat	50 g	20 min	11.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	300 ml	Safale