

## Pierwszy RIS

- Gravity **18.9 BLG**
- ABV **8.2 %**
- IBU **41**
- SRM **36**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **7 liter(s)**
- Trub loss **6 %**
- Size with trub loss **7.4 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **9.8 liter(s)**

### Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **7.7 liter(s)**
- Total mash volume **10.8 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **10 min**

### Mash step by step

- Heat up **7.7 liter(s)** of strike water to **70.5C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Sparge using **5.2 liter(s)** of **76C** water or to achieve **9.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (59%)	80 %	5
Grain	Strzegom Karmel 150	0.15 kg (4.4%)	75 %	150
Grain	Strzegom Pilzneński	0.3 kg (8.8%)	80 %	4
Grain	Fawcett - Pszeniczny Czekoladowy	0.1 kg (2.9%)	73 %	1001
Grain	Simpsons - Coffee Malt	0.1 kg (2.9%)	74 %	250
Grain	Strzegom Monachijski typ II	0.3 kg (8.8%)	79 %	25
Grain	Jęczmień palony	0.05 kg (1.5%)	55 %	1000
Adjunct	Jęczmień niesłodowany	0.2 kg (5.9%)	75 %	2
Grain	Fawcett - Pale Chocolate	0.1 kg (2.9%)	71 %	600
Sugar	CUKIER	0.09 kg (2.7%)	--- %	---

### Hops

Use for	Name	Amount	Time	Alpha acid
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Boil	Target	18 g	60 min	9.7 %
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## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	50 ml	Safale
Safale S-04	Ale	Dry	8 g	Safale

## Extras

Type	Name	Amount	Use for	Time
Flavor	Płatki Bourbon	5 g	Secondary	7 day(s)

## Notes

- wysładzanie 4,5L wody; dodatek 90 g cukru na koniec chmielenia.  
 blg ostudzonej brzezki 21  
 fermentacja start w 14C  
 Nov 17, 2019, 1:30 AM