

## PP RIS

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- Gravity **31.6 BLG**
- ABV **16 %**
- IBU **47**
- SRM **52.8**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **15.1 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **28 liter(s)**

### Steps

- Temp **67 C**, Time **70 min**

### Mash step by step

- Heat up **20 liter(s)** of strike water to **76.4C**
- Add grains
- Keep mash **70 min** at **67C**
- Sparge using **3.1 liter(s)** of **76C** water or to achieve **15.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5.5 kg (68.8%)	79 %	6
Grain	Strzegom Czekoladowy ciemny	0.5 kg (6.3%)	68 %	1200
Grain	Żytni	1 kg (12.5%)	85 %	8
Grain	Karmelowy Pszeniczny Strzegom	1 kg (12.5%)	79 %	130

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	50 g	60 min	4 %
Aroma (end of boil)	Kazbek	70 g	60 min	4.4 %
Aroma (end of boil)	Sybilla	15 g	10 min	8 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	200 ml	---