

## ris

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- Gravity **24.2 BLG**
- ABV **11.2 %**
- IBU **52**
- SRM **36.3**
- 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 **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **30.9 liter(s)**
- Total mash volume **41.2 liter(s)**

### Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **30.9 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **4.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (38.8%)	80 %	4
Grain	Strzegom Monachijski typ I	5 kg (48.5%)	79 %	16
Grain	Strzegom Karmel 300	1 kg (9.7%)	70 %	299
Grain	Strzegom Czekoladowy ciemny	0.3 kg (2.9%)	68 %	1200

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	50 g	60 min	4.6 %
Boil	Magnum	50 g	25 min	13.5 %
Boil	Lublin (Lubelski)	20 g	15 min	4.6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	100 g	---