

# SI

- Gravity **28.9 BLG**
- ABV ---
- IBU **91**
- SRM **40**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **30 liter(s)**
- Total mash volume **42 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **30 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **8.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	5 kg (41.7%)	80 %	7
Grain	Strzegom Monachijski typ I	1 kg (8.3%)	79 %	16
Grain	Strzegom Wiedeński	2.5 kg (20.8%)	79 %	10
Grain	Strzegom Karmel 600	0.5 kg (4.2%)	68 %	601
Grain	Carahell	0.5 kg (4.2%)	77 %	26
Grain	Chocolate Malt (US)	0.5 kg (4.2%)	60 %	690
Grain	Pszeniczny	0.5 kg (4.2%)	85 %	4
Grain	Black (Patent) Malt	0.5 kg (4.2%)	55 %	985
Grain	owsiany	0.5 kg (4.2%)	--- %	---
Grain	Żytni	0.5 kg (4.2%)	85 %	8

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	50 g	50 min	4 %
Boil	Mosaic	50 g	30 min	10 %
Boil	Marynka	50 g	60 min	10 %
Boil	Marynka	50 g	30 min	10 %

Boil	Lublin (Lubelski)	40 g	15 min	4 %
Dry Hop	Cascade	100 g	18 day(s)	6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	150 ml	Safale

### Extras

Type	Name	Amount	Use for	Time
Flavor	skórka pomarańczy	75 g	Boil	15 min
Other	płatki dębowe +burbon	150 g	Secondary	18 day(s)