

## #8 RIS

- Gravity **27 BLG**
- ABV **12.9 %**
- IBU **103**
- SRM **74.1**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **26.9 liter(s)**

### Mash information

- Mash efficiency **69 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **43.6 liter(s)**
- Total mash volume **58.1 liter(s)**

### Steps

- Temp **65 C**, Time **70 min**
- Temp **72 C**, Time **10 min**

### Mash step by step

- Heat up **43.6 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **70 min** at **65C**
- Keep mash **10 min** at **72C**
- Sparge using **-2.2 liter(s)** of **76C** water or to achieve **26.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	8.9 kg (61.3%)	80 %	7
Grain	Płatki owsiane	2 kg (13.8%)	85 %	3
Grain	Karmelowy Jasny	0.8 kg (5.5%)	75 %	50
Grain	Special B Malt	0.8 kg (5.5%)	65 %	315
Grain	Jęczmień palony	0.87 kg (6%)	1 %	1050
Grain	Briess - Midnight Wheat Malt	0.58 kg (4%)	1 %	1000
Grain	Fawcett - Pale Chocolate	0.58 kg (4%)	1 %	600

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	150 g	60 min	10 %
Boil	Chinook	15 g	60 min	13 %

### Yeasts

Name	Type	Form	Amount	Laboratory
WLP001 - California Ale Yeast	Ale	Slant	300 ml	White Labs

## Extras

Type	Name	Amount	Use for	Time
Water Agent	CaCl2 33% (ml)	5 g	Mash	---
Water Agent	CaCl2 33% (ml)	12 g	Boil	60 min
Water Agent	CaSO4	2 g	Boil	60 min
Water Agent	CaCO3	15 g	Mash	---
Water Agent	Kwas fosforowy	1.2 g	Mash	---