

## P.23 - RIS

- Gravity **23.1 BLG**
- ABV **10.5 %**
- IBU **26**
- SRM **39.3**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **30 min**
- Evaporation rate **11 %/h**
- Boil size **29.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **26.3 liter(s)**
- Total mash volume **35 liter(s)**

### Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **26.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **1 min** at **78C**
- Sparge using **11.8 liter(s)** of **76C** water or to achieve **29.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	2 kg (18.6%)	81 %	5
Grain	Biscuit Malt	2 kg (18.6%)	79 %	50
Grain	Weyermann - Pale Ale Malt	1 kg (9.3%)	85 %	7
Grain	Monachijski	1 kg (9.3%)	80 %	16
Grain	Weyermann - Chocolate Wheat	0.5 kg (4.7%)	74 %	800
Grain	Castle Malting Château Cafe	0.5 kg (4.7%)	75.5 %	500
Grain	Oats, Flaked	1.5 kg (14%)	80 %	2
Grain	Jęczmień palony	0.25 kg (2.3%)	55 %	985
Sugar	Milk Sugar (Lactose)	1 kg (9.3%)	76.1 %	0
Sugar	Candi Sugar, Clear	1 kg (9.3%)	78.3 %	2

### Hops

Use for	Name	Amount	Time	Alpha acid
Whirlpool	Cascade	113.2 g	20 min	6 %
Whirlpool	Centennial	46.6 g	20 min	10.5 %
Boil	Centennial	10 g	30 min	10.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	500 ml	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Flavor	Kakao DecoMorreno	160 g	Boil	5 min