

# RIS

- Gravity **28.1 BLG**
- ABV **13.6 %**
- IBU **79**
- SRM **64.6**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **11.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.1 liter(s)**
- Boil time **120 min**
- Evaporation rate **10 %/h**
- Boil size **15.8 liter(s)**

## Mash information

- Mash efficiency **64 %**
- Liquor-to-grist ratio **2.3 liter(s) / kg**
- Mash size **19.1 liter(s)**
- Total mash volume **27.5 liter(s)**

## Steps

- Temp **67 C**, Time **90 min**

## Mash step by step

- Heat up **19.1 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **90 min** at **67C**
- Sparge using **5 liter(s)** of **76C** water or to achieve **15.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Malt (2 Row) UK	6.42 kg (77.2%)	78 %	6
Grain	Płatki owsiane	0.4 kg (4.8%)	85 %	3
Grain	Carafa II	0.5 kg (6%)	70 %	812
Grain	Weyermann Caramunich 3	0.5 kg (6%)	76 %	150
Grain	Jęczmień palony	0.5 kg (6%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	26.5 g	60 min	13.5 %
Boil	Mosaic	26.5 g	30 min	10 %
Boil	Mosaic	26.5 g	30 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Liquid	1000 ml	Fermentum Mobile