

# RIS Grzegorz

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- Gravity **24 BLG**
- ABV **11 %**
- IBU **123**
- SRM **51.4**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11.5 liter(s)**
- Boil time **120 min**
- Evaporation rate **20 %/h**
- Boil size **17.5 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **13.9 liter(s)**
- Total mash volume **19.4 liter(s)**

## Steps

- Temp **65 C**, Time **70 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **13.9 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **70 min** at **65C**
- Keep mash **1 min** at **78C**
- Sparge using **9.2 liter(s)** of **76C** water or to achieve **17.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.2 kg (70%)	80 %	5
Sugar	Cukier biały	0.45 kg (7.5%)	100 %	2
Grain	Cara Gold Castlemalting	0.6 kg (10%)	78 %	120
Grain	Weyermann - Carafa II special	0.3 kg (5%)	70 %	837
Grain	Black Barley (Roast Barley)	0.15 kg (2.5%)	55 %	985
Grain	Weyermann - Chocolate Rye	0.3 kg (5%)	20 %	650

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	35 g	70 min	12.9 %
Boil	Waimea	40 g	40 min	14 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM54 Gorączka kalifornijska	Ale	Slant	200 ml	Fermentum Mobile