

# GRUBY RYŚ

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- Gravity **31 BLG**
- ABV ---
- IBU **54**
- SRM **46.3**
- 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 **3 liter(s) / kg**
- Mash size **39.3 liter(s)**
- Total mash volume **52.4 liter(s)**

## Steps

- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **30 min**

## Mash step by step

- Heat up **39.3 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **30 min** at **72C**
- Sparge using **0.2 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	10 kg (76.3%)	81 %	4
Grain	monachijski	2 kg (15.3%)	--- %	---
Grain	Carafa II	0.5 kg (3.8%)	30 %	812
Grain	Jęczmień palony	0.6 kg (4.6%)	30 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	100 g	60 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Slant	300 ml	fermentis