

# Ris gryczany

- Gravity **25.3 BLG**
- ABV **11.8 %**
- IBU **73**
- SRM **40**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11 liter(s)**
- Boil time **90 min**
- Evaporation rate **20 %/h**
- Boil size **15 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **20.7 liter(s)**
- Total mash volume **26.6 liter(s)**

## Steps

- Temp **68 C**, Time **90 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **20.7 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **0.2 liter(s)** of **76C** water or to achieve **15 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	kasza gryczana	1 kg (16.9%)	65 %	50
Grain	Viking Pale Ale malt	4 kg (67.7%)	80 %	5
Grain	Diastatyczny	0.4 kg (6.8%)	81 %	4
Grain	Carafa III specjal	0.05 kg (0.8%)	70 %	1034
Grain	Strzegom Czekoladowy 400	0.3 kg (5.1%)	68 %	400
Grain	Strzegom Czekoladowy ciemny	0.16 kg (2.7%)	68 %	1200

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	50 g	60 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	100 ml	Safale