

# Rye Imperial Stout

- Gravity **21.1 BLG**
- ABV **9.4 %**
- IBU **41**
- SRM **26.9**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.3 liter(s) / kg**
- Mash size **20.5 liter(s)**
- Total mash volume **29.4 liter(s)**

## Steps

- Temp **63 C**, Time **40 min**
- Temp **66 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **20.5 liter(s)** of strike water to **72.3C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **30 min** at **66C**
- Keep mash **1 min** at **78C**
- Sparge using **13.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Żytni	8.3 kg (93.3%)	85 %	8
Grain	żyto prażone	0.6 kg (6.7%)	60 %	700

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	50 g	60 min	10.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	400 ml	Fermentis