

# 100% Rye RIS

- Gravity **25.1 BLG**
- ABV **11.7 %**
- IBU **49**
- SRM **47.3**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **180 min**
- Evaporation rate **5 %/h**
- Boil size **13.2 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **20.4 liter(s)**
- Total mash volume **27.7 liter(s)**

## Steps

- Temp **68 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **20.4 liter(s)** of strike water to **76.6C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **0.1 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Rye Malt	5 kg (68.5%)	63 %	10
Grain	Rye, Flaked	0.8 kg (11%)	78.3 %	4
Grain	Simpsons - Crystal Rye	0.75 kg (10.3%)	73 %	177
Grain	Weyermann - Chocolate Rye	0.75 kg (10.3%)	20 %	493

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	35 g	60 min	10.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Slant	300 ml	---

## Extras

Type	Name	Amount	Use for	Time
Other	Łuska ryżowa	2000 g	Mash	60 min
Water Agent	Lactic acid	10 g	Mash	60 min

Water Agent	CaCl2	6 g	Mash	60 min
Fining	whirlfloc-t	1.25 g	Boil	10 min