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

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

Hops

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

Yeasts

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

Extras

Туре	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