

# RIS

- Gravity **20.9 BLG**
- ABV **9.3 %**
- IBU **47**
- SRM **46.6**
- 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 **80 min**
- Evaporation rate **10 %/h**
- Boil size **27.2 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **30.8 liter(s)**
- Total mash volume **41.8 liter(s)**

## Steps

- Temp **69 C**, Time **90 min**

## Mash step by step

- Heat up **30.8 liter(s)** of strike water to **77.8C**
- Add grains
- Keep mash **90 min** at **69C**
- Sparge using **7.4 liter(s)** of **76C** water or to achieve **27.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	6 kg (54.5%)	80 %	5
Grain	Pszeniczny	0.5 kg (4.5%)	85 %	4
Grain	Strzegom Monachijski typ II	2 kg (18.2%)	70 %	22
Grain	Castle Malting Coffee light	1 kg (9.1%)	60 %	250
Grain	Simpsons - Crystal Extra Dark	1 kg (9.1%)	74 %	315
Grain	Carafa® Special Typ III	0.5 kg (4.5%)	65 %	1000

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	40 g	60 min	15.5 %
Dry Hop	Warrior	60 g	30 day(s)	15.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Slant	400 ml	Fermentum Mobile