

# RIS

- Gravity **24.2 BLG**
- ABV **11.2 %**
- IBU **69**
- SRM **55.6**
- 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 **120 min**
- Evaporation rate **10 %/h**
- Boil size **27.6 liter(s)**

## Mash information

- Mash efficiency **51 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **40.8 liter(s)**
- Total mash volume **54.4 liter(s)**

## Steps

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

## Mash step by step

- Heat up **40.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **0.4 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	9 kg (63.8%)	80 %	5
Grain	Strzegom Monachijski typ II	1 kg (7.1%)	79 %	22
Grain	Strzegom Karmel 600	0.4 kg (2.8%)	68 %	601
Grain	Weyermann pszeniczny jasny	1.1 kg (7.8%)	80 %	6
Grain	Jęczmień palony	0.5 kg (3.5%)	55 %	985
Grain	Strzegom Czekoladowy jasny	0.5 kg (3.5%)	68 %	400
Grain	Strzegom Czekoladowy ciemny	0.25 kg (1.8%)	68 %	1200
Grain	Caraaroma	0.25 kg (1.8%)	78 %	400
Grain	Płatki owsiane	0.6 kg (4.3%)	85 %	3
Sugar	Brown Sugar, Light	0.5 kg (3.5%)	100 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	55 g	60 min	15 %
Boil	Challenger	50 g	15 min	6.7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Slant	350 ml	Fermentum Mobile