

# Ris

- Gravity **24.6 BLG**
- ABV **11.4 %**
- IBU **57**
- SRM **39.5**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **56 liter(s)**
- Trub loss **5 %**
- Size with trub loss **58.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **70.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.2 liter(s) / kg**
- Mash size **64.9 liter(s)**
- Total mash volume **94.4 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **64.9 liter(s)** of strike water to **71.5C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **35.4 liter(s)** of **76C** water or to achieve **70.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	10 kg (33.9%)	80 %	4
Grain	Strzegom Pale Ale	10 kg (33.9%)	79 %	6
Grain	Golden Ale Viking Malt	1 kg (3.4%)	95 %	10
Grain	strzegom Pale Cookie	1 kg (3.4%)	75 %	8
Grain	Strzegom Karmel 300	0.3 kg (1%)	70 %	299
Grain	Carafa II	0.6 kg (2%)	70 %	812
Grain	Strzegom Czekoladowy ciemny	0.6 kg (2%)	68 %	1200
Grain	Płatki żytnie	0.8 kg (2.7%)	85 %	3
Grain	Płatki owsiane	1.3 kg (4.4%)	60 %	3
Grain	Strzegom Karmel 600	0.4 kg (1.4%)	68 %	601
Grain	Strzegom pszenica prażona	0.7 kg (2.4%)	70 %	1000
Grain	Płatki pszeniczne	0.6 kg (2%)	60 %	3
Grain	Monachijski	2.2 kg (7.5%)	80 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	marynka	207.41 g	60 min	6.5 %
Boil	Nugget	51.85 g	50 min	10.1 %
Boil	Nugget	103.7 g	15 min	10.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M42 New World Strong Ale	Ale	Slant	1866.67 ml	Mangrove Jack's