

# RIS

- Gravity **25.5 BLG**
- ABV **12 %**
- IBU **55**
- SRM **45.5**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **3 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **120 min**
- Evaporation rate **10 %/h**
- Boil size **21.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **20.3 liter(s)**
- Total mash volume **28.4 liter(s)**

## Steps

- Temp **67 C**, Time **90 min**
- Temp **77 C**, Time **10 min**

## Mash step by step

- Heat up **20.3 liter(s)** of strike water to **76.4C**
- Add grains
- Keep mash **90 min** at **67C**
- Keep mash **10 min** at **77C**
- Sparge using **9.5 liter(s)** of **76C** water or to achieve **21.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.1 kg (50.6%)	80 %	5
Grain	Viking Munich Malt	2 kg (24.7%)	78 %	18
Grain	Słód Caramunich Typ II Weyermann	0.4 kg (4.9%)	73 %	120
Grain	Jęczmień palony	0.4 kg (4.9%)	55 %	985
Grain	Strzegom Karmel 600	0.3 kg (3.7%)	68 %	601
Grain	Pszeniczny	0.2 kg (2.5%)	85 %	4
Grain	Fawcett - Pale Chocolate	0.25 kg (3.1%)	71 %	600
Grain	Płatki jęczmienne	0.15 kg (1.9%)	85 %	3
Grain	Płatki owsiane	0.15 kg (1.9%)	85 %	3
Grain	Płatki pszeniczne	0.15 kg (1.9%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	40 g	60 min	10.5 %
Boil	Columbus/Tomahawk/Zeus	8 g	60 min	12.5 %
Boil	Citra	17 g	20 min	13.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M42 New World Strong Ale	Ale	Dry	15 g	Mangrove Jack's