

# RIS

- Gravity **24 BLG**
- ABV **11 %**
- IBU **90**
- SRM **68.2**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.9 liter(s)**
- Boil time **90 min**
- Evaporation rate **18 %/h**
- Boil size **24.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **17.6 liter(s)**
- Total mash volume **26.4 liter(s)**

## Steps

- Temp **72 C**, Time **90 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **17.6 liter(s)** of strike water to **85C**
- Add grains
- Keep mash **90 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **24.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (34.1%)	80 %	4
Grain	Strzegom Monachijski typ II	1 kg (11.4%)	79 %	22
Grain	Strzegom Wiedeński	1 kg (11.4%)	79 %	10
Grain	słód diastatyczny	1 kg (11.4%)	80 %	4
Grain	Strzegom Czekoladowy 400	0.5 kg (5.7%)	68 %	400
Grain	Strzegom Czekoladowy ciemny	0.3 kg (3.4%)	68 %	1200
Grain	czekoladowy żytni Strzegom	0.5 kg (5.7%)	75 %	600
Grain	Karmelowy żytni Strzegom	0.5 kg (5.7%)	75 %	130
Grain	Carafa II	0.2 kg (2.3%)	70 %	1100
Grain	Carafa III	0.3 kg (3.4%)	70 %	1400
Grain	cookie	0.5 kg (5.7%)	70 %	49

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	40 g	40 min	12.4 %

Boil	Challenger	50 g	40 min	5.8 %
Boil	Columbus/Tomahawk/Zeus	30 g	40 min	15.5 %