

# RIS

- Gravity **31.4 BLG**
- ABV **15.8 %**
- IBU **104**
- SRM **61.7**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **120 min**
- Evaporation rate **10 %/h**
- Boil size **16.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.6 liter(s)**
- Total mash volume **32.8 liter(s)**

## Steps

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

## Mash step by step

- Heat up **24.6 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **0.2 liter(s)** of **76C** water or to achieve **16.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.5 kg (54.9%)	80 %	5
Grain	Strzegom Monachijski typ II	2.8 kg (34.1%)	79 %	22
Grain	Carafa III	0.3 kg (3.7%)	70 %	1034
Grain	Czekoladowy	0.3 kg (3.7%)	60 %	788
Grain	Strzegom Czekoladowy ciemny	0.3 kg (3.7%)	68 %	1200

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Nugget	75 g	60 min	13 %
Boil	Nugget	25 g	30 min	13 %

## Notes

- Całe gotowanie trwa 120 minut  
Chmiel jest dodawany dopiero po godzinie od momentu zagotowania.  
Należy wybrać odpowiednie drożdże.  
*Apr 11, 2018, 10:08 AM*