

# RIS

- Gravity **25.3 BLG**
- ABV **11.8 %**
- IBU **71**
- SRM **90.2**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **10 %**
- Size with trub loss **20.7 liter(s)**
- Boil time **120 min**
- Evaporation rate **15 %/h**
- Boil size **30.4 liter(s)**

## Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **34.7 liter(s)**
- Total mash volume **46.2 liter(s)**

## Steps

- Temp **68 C**, Time **75 min**
- Temp **78 C**, Time **2 min**

## Mash step by step

- Heat up **34.7 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **75 min** at **68C**
- Keep mash **2 min** at **78C**
- Sparge using **7.3 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (34.6%)	80 %	5
Grain	Pale Cookie	1.85 kg (16%)	79 %	30
Grain	Strzegom Monachijski typ II	1.85 kg (16%)	79 %	22
Grain	Strzegom Czekoladowy ciemny	0.5 kg (4.3%)	68 %	1200
Grain	Strzegom Czekoladowy jasny	0.3 kg (2.6%)	68 %	400
Grain	Jęczmień palony	0.75 kg (6.5%)	55 %	2300
Grain	Weyermann - Carapils	0.5 kg (4.3%)	78 %	4
Grain	Special B Castle	0.5 kg (4.3%)	70 %	350
Grain	Caraaroma	0.5 kg (4.3%)	78 %	400
Grain	Płatki owsiane	0.8 kg (6.9%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	50 g	60 min	15.5 %
Boil	East Kent Goldings	40 g	60 min	5.1 %
Boil	Fuggles	50 g	15 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Slant	200 ml	Fermentum Mobile

## Notes

- Słody palone od początku.  
*Jan 28, 2020, 3:05 PM*