

# RIS

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **98**
- SRM **30.5**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **29.9 liter(s)**

## Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

- Temp **65 C**, Time **90 min**
- Temp **78 C**, Time **15 min**

## Mash step by step

- Heat up **16.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **90 min** at **65C**
- Keep mash **15 min** at **78C**
- Sparge using **18.9 liter(s)** of **76C** water or to achieve **29.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilsner® 2,5-4,5 EBC Weyermann	1.2 kg (21.8%)	80 %	4
Grain	Monachijski typ II 20-25 EBC Weyermann	1.2 kg (21.8%)	80 %	20
Grain	Monachijski	0.4 kg (7.3%)	80 %	16
Grain	Strzegom Bursztynowy	0.5 kg (9.1%)	70 %	49
Grain	Strzegom Czekoladowy jasny	0.4 kg (7.3%)	68 %	400
Grain	Strzegom Czekoladowy ciemny	0.2 kg (3.6%)	68 %	1200
Grain	Strzegom pszenica prażona	0.2 kg (3.6%)	70 %	1000
Grain	Płatki pszeniczne	0.4 kg (7.3%)	85 %	3
Grain	Wędzony bukiem Viking Malt	1 kg (18.2%)	82 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	50 g	60 min	14.4 %

Whirlpool	Bramling	20 g	30 min	7.5 %
Boil	Bramling	30 g	45 min	7.5 %
Boil	epic	25 g	10 min	5 %
Whirlpool	epic	25 g	30 min	5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	23 g	Danstar

### Extras

Type	Name	Amount	Use for	Time
Flavor	płatki dębowe	50 g	Secondary	21 day(s)