

# RIS

- Gravity **27.2 BLG**
- ABV ---
- IBU **93**
- SRM **103.3**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **33 liter(s)**
- Total mash volume **44 liter(s)**

## Steps

- Temp **66 C**, Time **80 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **33 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **80 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **4.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (45.5%)	79 %	6
Grain	Strzegom Pszeniczny	2 kg (18.2%)	81 %	6
Grain	Strzegom Monachijski typ II	1 kg (9.1%)	79 %	22
Grain	Strzegom Czekoladowy jasny	1 kg (9.1%)	68 %	400
Grain	Jęczmień palony	1 kg (9.1%)	55 %	985
Grain	Caraaroma	0.5 kg (4.5%)	78 %	400
Grain	Weyermann - Carafa I	0.5 kg (4.5%)	70 %	690

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	150 g	90 min	8.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	23 g	Safale