

# RIS

- Gravity **24.9 BLG**
- ABV **11.6 %**
- IBU **58**
- SRM **44.2**
- 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 **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **21.6 liter(s)**
- Total mash volume **32.4 liter(s)**

## Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

## Mash step by step

- Heat up **21.6 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	9 kg (83.3%)	79 %	6
Grain	Płatki owsiane	0.8 kg (7.4%)	60 %	3
Grain	Strzegom Karmel 300	0.2 kg (1.9%)	70 %	299
Grain	Strzegom Czekoladowy ciemny	0.5 kg (4.6%)	68 %	1200
Grain	Jęczmień palony	0.3 kg (2.8%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnat	50 g	60 min	11.2 %
Boil	Magnat	35 g	30 min	11.2 %
Aroma (end of boil)	Magnat	15 g	0 min	7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Slant	400 ml	Fermentum Mobile