

# Ris

- Gravity **26.4 BLG**
- ABV **12.5 %**
- IBU **63**
- SRM **62.4**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **100 min**
- Evaporation rate **5 %/h**
- Boil size **11.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **1.82 liter(s) / kg**
- Mash size **10 liter(s)**
- Total mash volume **15.5 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **10 liter(s)** of strike water to **78.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **7.4 liter(s)** of **76C** water or to achieve **11.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3 kg (54.5%)	79 %	6
Grain	Strzegom Monachijski typ II	1 kg (18.2%)	79 %	22
Grain	Strzegom Czekoladowy ciemny	0.25 kg (4.5%)	68 %	1200
Grain	Strzegom Czekoladowy jasny	0.15 kg (2.7%)	68 %	400
Grain	Jęczmień palony	0.25 kg (4.5%)	55 %	985
Grain	Strzegom Karmel 300	0.2 kg (3.6%)	70 %	299
Grain	Żytni	0.25 kg (4.5%)	85 %	8
Grain	Castle Cafe	0.2 kg (3.6%)	75.5 %	480
Grain	Płatki owsiane	0.2 kg (3.6%)	60 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	50 g	100 min	7 %
Boil	East Kent Goldings	15 g	40 min	5.1 %
Boil	East Kent Goldings	15 g	10 min	5.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Us05	Ale	Slant	100 ml	Piwniczne