

# RIS 2021

---

- Gravity **23.1 BLG**
- ABV **10.5 %**
- IBU **64**
- SRM **54.6**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **120 min**
- Evaporation rate **8 %/h**
- Boil size **20.1 liter(s)**

## Mash information

- Mash efficiency **55 %**
- Liquor-to-grist ratio **2.2 liter(s) / kg**
- Mash size **21.8 liter(s)**
- Total mash volume **31.7 liter(s)**

## Steps

- Temp **65 C**, Time **90 min**
- Temp **70 C**, Time **60 min**

## Mash step by step

- Heat up **21.8 liter(s)** of strike water to **75.2C**
- Add grains
- Keep mash **90 min** at **65C**
- Keep mash **60 min** at **70C**
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **20.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3 kg (30.3%)	81 %	4
Grain	Strzegom Pale Ale	2 kg (20.2%)	79 %	6
Grain	Monachijski	2 kg (20.2%)	80 %	16
Grain	Żytni	1 kg (10.1%)	85 %	8
Grain	Jęczmień palony	0.2 kg (2%)	55 %	985
Grain	Crystal II 200	0.4 kg (4%)	71 %	200
Grain	Strzegom Czekoladowy 1200	0.4 kg (4%)	68 %	1202
Grain	Caraaroma	0.5 kg (5.1%)	78 %	400
Grain	cookie	0.4 kg (4%)	70 %	40

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	60 g	60 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Slant	700 ml	---