

# RIS 2021

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- 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 | ---        |