

# RIS

- Gravity **25.7 BLG**
- ABV **12.1 %**
- IBU **89**
- SRM **45**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.8 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.1 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **29.2 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

## Mash step by step

- Heat up **19.8 liter(s)** of strike water to **76.9C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Sparge using **13.4 liter(s)** of **76C** water or to achieve **23.8 liter(s)** of wort

## Fermentables

| Type           | Name                          | Amount         | Yield | EBC  |
|----------------|-------------------------------|----------------|-------|------|
| Grain          | Viking Pale Ale malt          | 5.4 kg (51.8%) | 80 %  | 5    |
| Grain          | Viking Malt Wędzony Czereśnią | 1 kg (9.6%)    | 82 %  | 10   |
| Grain          | Strzegom Czekoladowy jasny    | 0.55 kg (5.3%) | 68 %  | 400  |
| Grain          | Jęczmień palony               | 0.2 kg (1.9%)  | 55 %  | 985  |
| Grain          | Strzegom Czekoladowy jasny    | 0.25 kg (2.4%) | 68 %  | 400  |
| Grain          | Carafa II                     | 0.2 kg (1.9%)  | 70 %  | 812  |
| Grain          | Carafa III                    | 0.2 kg (1.9%)  | 70 %  | 1034 |
| Grain          | Płatki owsiane                | 0.625 kg (6%)  | 60 %  | 3    |
| Liquid Extract | WES ekstrakt słodowy jasny    | 1 kg (9.6%)    | 80 %  | 45   |
| Grain          | Pszeniczny                    | 1 kg (9.6%)    | 85 %  | 4    |

## Hops

| Use for | Name   | Amount | Time   | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil    | Magnum | 100 g  | 50 min | 13.5 %     |

## Yeasts

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

### Extras

| Type   | Name           | Amount | Use for   | Time     |
|--------|----------------|--------|-----------|----------|
| Flavor | łuska kakaowca | 500 g  | Mash      | 20 min   |
| Flavor | łuska kakaowca | 200 g  | Secondary | 4 day(s) |

### Notes

- łuska kakaowca gotowana 15 min przed dodaniem na cichą fermentację  
*Apr 10, 2022, 12:14 AM*