

# RIS

- Gravity **21.1 BLG**
- ABV **9.4 %**
- IBU **63**
- SRM **61.2**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.7 liter(s)**

## Mash information

- Mash efficiency **55 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **20.5 liter(s)**
- Total mash volume **28.1 liter(s)**

## Steps

- Temp **66 C**, Time **70 min**
- Temp **66 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **20.5 liter(s)** of strike water to **74.5C**
- Add grains
- Keep mash **15 min** at **66C**
- Keep mash **70 min** at **66C**
- Keep mash **5 min** at **78C**
- Sparge using **2.8 liter(s)** of **76C** water or to achieve **15.7 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount         | Yield | EBC  |
|-------|-----------------------------|----------------|-------|------|
| Grain | Briess - Pale Ale Malt      | 4.4 kg (57.9%) | 80 %  | 7    |
| Grain | Monachijski                 | 1.7 kg (22.4%) | 80 %  | 16   |
| Grain | Melanoiden Malt             | 0.3 kg (3.9%)  | 80 %  | 39   |
| Grain | Strzegom Karmel 600         | 0.2 kg (2.6%)  | 68 %  | 601  |
| Grain | Strzegom Czekoladowy jasny  | 0.4 kg (5.3%)  | 68 %  | 400  |
| Grain | Strzegom Czekoladowy ciemny | 0.35 kg (4.6%) | 68 %  | 1200 |
| Grain | Jęczmień palony             | 0.25 kg (3.3%) | 55 %  | 985  |

## Hops

| Use for | Name       | Amount | Time   | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil    | Challenger | 50 g   | 60 min | 7 %        |
| Boil    | First Gold | 20 g   | 60 min | 7.5 %      |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|  |     |     |      |                 |
|--|-----|-----|------|-----------------|
| Mangrove Jack's<br>M42 New World<br>Strong Ale | Ale | Dry | 20 g | Mangrove Jack's |
|--|-----|-----|------|-----------------|