

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