

# Ris

- Gravity **24.6 BLG**
- ABV **11.4 %**
- IBU **57**
- SRM **39.5**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **56 liter(s)**
- Trub loss **5 %**
- Size with trub loss **58.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **70.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.2 liter(s) / kg**
- Mash size **64.9 liter(s)**
- Total mash volume **94.4 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **64.9 liter(s)** of strike water to **71.5C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **35.4 liter(s)** of **76C** water or to achieve **70.8 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount        | Yield | EBC  |
|-------|-----------------------------|---------------|-------|------|
| Grain | Strzegom Pilzneński         | 10 kg (33.9%) | 80 %  | 4    |
| Grain | Strzegom Pale Ale           | 10 kg (33.9%) | 79 %  | 6    |
| Grain | Golden Ale Viking Malt      | 1 kg (3.4%)   | 95 %  | 10   |
| Grain | strzegom Pale Cookie        | 1 kg (3.4%)   | 75 %  | 8    |
| Grain | Strzegom Karmel 300         | 0.3 kg (1%)   | 70 %  | 299  |
| Grain | Carafa II                   | 0.6 kg (2%)   | 70 %  | 812  |
| Grain | Strzegom Czekoladowy ciemny | 0.6 kg (2%)   | 68 %  | 1200 |
| Grain | Płatki żytnie               | 0.8 kg (2.7%) | 85 %  | 3    |
| Grain | Płatki owsiane              | 1.3 kg (4.4%) | 60 %  | 3    |
| Grain | Strzegom Karmel 600         | 0.4 kg (1.4%) | 68 %  | 601  |
| Grain | Strzegom pszenica prażona   | 0.7 kg (2.4%) | 70 %  | 1000 |
| Grain | Płatki pszeniczne           | 0.6 kg (2%)   | 60 %  | 3    |
| Grain | Monachijski                 | 2.2 kg (7.5%) | 80 %  | 16   |

## Hops

| Use for | Name    | Amount   | Time   | Alpha acid |
|---------|---------|----------|--------|------------|
| Boil    | marynka | 207.41 g | 60 min | 6.5 %      |
| Boil    | Nugget  | 51.85 g  | 50 min | 10.1 %     |
| Boil    | Nugget  | 103.7 g  | 15 min | 10.1 %     |

## Yeasts

| Name                                     | Type | Form  | Amount     | Laboratory      |
|--|------|-------|------------|-----------------|
| Mangrove Jack's M42 New World Strong Ale | Ale  | Slant | 1866.67 ml | Mangrove Jack's |