

# RIS

- Gravity **24 BLG**
- ABV **11 %**
- IBU **90**
- SRM **68.2**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.9 liter(s)**
- Boil time **90 min**
- Evaporation rate **18 %/h**
- Boil size **24.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **17.6 liter(s)**
- Total mash volume **26.4 liter(s)**

## Steps

- Temp **72 C**, Time **90 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **17.6 liter(s)** of strike water to **85C**
- Add grains
- Keep mash **90 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **24.9 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount        | Yield | EBC  |
|-------|-----------------------------|---------------|-------|------|
| Grain | Viking Pale Ale malt        | 3 kg (34.1%)  | 80 %  | 4    |
| Grain | Strzegom Monachijski typ II | 1 kg (11.4%)  | 79 %  | 22   |
| Grain | Strzegom Wiedeński          | 1 kg (11.4%)  | 79 %  | 10   |
| Grain | słód diastatyczny           | 1 kg (11.4%)  | 80 %  | 4    |
| Grain | Strzegom Czekoladowy 400    | 0.5 kg (5.7%) | 68 %  | 400  |
| Grain | Strzegom Czekoladowy ciemny | 0.3 kg (3.4%) | 68 %  | 1200 |
| Grain | czekoladowy żytni Strzegom  | 0.5 kg (5.7%) | 75 %  | 600  |
| Grain | Karmelowy żytni Strzegom    | 0.5 kg (5.7%) | 75 %  | 130  |
| Grain | Carafa II                   | 0.2 kg (2.3%) | 70 %  | 1100 |
| Grain | Carafa III                  | 0.3 kg (3.4%) | 70 %  | 1400 |
| Grain | cookie                      | 0.5 kg (5.7%) | 70 %  | 49   |

## Hops

| Use for | Name                   | Amount | Time   | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil    | Columbus/Tomahawk/Zeus | 40 g   | 40 min | 12.4 %     |

|      |                        |      |        |        |
|------|------------------------|------|--------|--------|
| Boil | Challenger             | 50 g | 40 min | 5.8 %  |
| Boil | Columbus/Tomahawk/Zeus | 30 g | 40 min | 15.5 % |