

# saj

- Gravity **25.1 BLG**
- ABV **11.7 %**
- IBU **69**
- SRM **45.8**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **16 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **66 C**, Time **50 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **16 liter(s)** of strike water to **77.5C**
- Add grains
- Keep mash **50 min** at **66C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **11 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount        | Yield | EBC  |
|-------|-----------------------------|---------------|-------|------|
| Grain | Viking Pale Ale malt        | 5 kg (62.5%)  | 80 %  | 5    |
| Grain | Monachijski                 | 1 kg (12.5%)  | 80 %  | 16   |
| Grain | Strzegom Pszeniczny         | 1 kg (12.5%)  | 81 %  | 6    |
| Grain | Strzegom Karmel 300         | 0.3 kg (3.8%) | 70 %  | 299  |
| Grain | Château Caffé               | 0.2 kg (2.5%) | 70 %  | 500  |
| Grain | Jęczmień palony             | 0.2 kg (2.5%) | 55 %  | 985  |
| Grain | Strzegom Czekoladowy ciemny | 0.2 kg (2.5%) | 68 %  | 1200 |
| Grain | Strzegom Barwiący           | 0.1 kg (1.3%) | 68 %  | 1300 |

## Hops

| Use for             | Name         | Amount | Time   | Alpha acid |
|---------------------|--------------|--------|--------|------------|
| Aroma (end of boil) | Nugget       | 30 g   | 10 min | 15.3 %     |
| Boil                | Styrian Wolf | 20 g   | 60 min | 13.8 %     |
| Boil                | Magnat       | 30 g   | 60 min | 11.2 %     |

## Yeasts

| <b>Name</b> | <b>Type</b> | <b>Form</b> | <b>Amount</b> | <b>Laboratory</b> |
|-------------|-------------|-------------|---------------|-------------------|
| 04          | Ale         | Dry         | 10 g          | ds                |