

# RIS 2020

- Gravity **27 BLG**
- ABV **12.9 %**
- IBU **65**
- SRM **54.1**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **23.8 liter(s)**

## Mash information

- Mash efficiency **50 %**
- Liquor-to-grist ratio **2.35 liter(s) / kg**
- Mash size **36.1 liter(s)**
- Total mash volume **51.4 liter(s)**

## Steps

- Temp **63 C**, Time **30 min**
- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

## Mash step by step

- Heat up **36.1 liter(s)** of strike water to **72.1C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **40 min** at **66C**
- Keep mash **20 min** at **72C**
- Sparge using **3.1 liter(s)** of **76C** water or to achieve **23.8 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount         | Yield | EBC  |
|-------|-----------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt        | 6 kg (39.1%)   | 80 %  | 5    |
| Grain | Strzegom Pilzneński         | 3.5 kg (22.8%) | 80 %  | 4    |
| Grain | Żytni                       | 1.5 kg (9.8%)  | 85 %  | 8    |
| Grain | Monachijski                 | 1.5 kg (9.8%)  | 80 %  | 16   |
| Grain | Pszeniczny                  | 1 kg (6.5%)    | 85 %  | 4    |
| Grain | Caraaroma                   | 0.8 kg (5.2%)  | 78 %  | 400  |
| Grain | Strzegom pszenica prażona   | 0.45 kg (2.9%) | 70 %  | 1000 |
| Grain | Jęczmień palony             | 0.3 kg (2%)    | 55 %  | 985  |
| Grain | Caramel/Crystal Malt - 120L | 0.3 kg (2%)    | 72 %  | 236  |

## Hops

| Use for | Name   | Amount | Time   | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil    | Magnum | 90 g   | 60 min | 10.5 %     |

## Yeasts

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

|                                  |     |       |        |            |
|----------------------------------|-----|-------|--------|------------|
| WLP001 - California<br>Ale Yeast | Ale | Slant | 450 ml | White Labs |
|----------------------------------|-----|-------|--------|------------|