

# #1 RIS

- Gravity **21.1 BLG**
- ABV **9.4 %**
- IBU **108**
- SRM **50.9**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.7 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **17.7 liter(s)**

## Mash information

- Mash efficiency **62 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.6 liter(s)**
- Total mash volume **28.8 liter(s)**

## Fermentables

| Type  | Name                        | Amount         | Yield | EBC  |
|-------|-----------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt        | 4.8 kg (66.7%) | 80 %  | 5    |
| Grain | Monachijski                 | 0.8 kg (11.1%) | 80 %  | 16   |
| Grain | Strzegom Bursztynowy        | 0.8 kg (11.1%) | 70 %  | 49   |
| Grain | Strzegom Czekoladowy jasny  | 0.2 kg (2.8%)  | 68 %  | 400  |
| Grain | Strzegom Czekoladowy ciemny | 0.4 kg (5.6%)  | 68 %  | 1200 |
| Grain | Strzegom pszenica prażona   | 0.2 kg (2.8%)  | 70 %  | 1000 |

## Hops

| Use for             | Name                   | Amount | Time   | Alpha acid |
|---------------------|------------------------|--------|--------|------------|
| Aroma (end of boil) | Bramling               | 50 g   | 0 min  | 6 %        |
| Boil                | Columbus/Tomahawk/Zeus | 50 g   | 60 min | 15.5 %     |
| Boil                | Fuggles                | 25 g   | 30 min | 4.5 %      |
| Boil                | Fuggles                | 25 g   | 15 min | 4.5 %      |

## Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 300 ml | Fermentis  |