

## Dry Stout (RISa)

- Gravity **35.5 BLG**
- ABV **18.8 %**
- IBU **79**
- SRM **45.8**
- Style **Dry Stout**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.82 liter(s) / kg**
- Mash size **22 liter(s)**
- Total mash volume **29.8 liter(s)**

### Steps

- Temp **52 C**, Time **10 min**
- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **60 min**

### Mash step by step

- Heat up **22 liter(s)** of strike water to **57.7C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **40 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **60 min** at **78C**
- Sparge using **-1.5 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

### Fermentables

| Type  | Name                           | Amount        | Yield | EBC  |
|-------|--------------------------------|---------------|-------|------|
| Grain | Viking Pale Ale malt           | 5 kg (64.1%)  | 80 %  | 5    |
| Grain | Karmelowy Jasny<br>30EBC       | 0.2 kg (2.6%) | 75 %  | 30   |
| Grain | Strzegom Karmel<br>150         | 0.2 kg (2.6%) | 75 %  | 150  |
| Grain | Strzegom<br>Czekoladowy ciemny | 0.2 kg (2.6%) | 68 %  | 1200 |
| Grain | Jęczmień palony                | 0.2 kg (2.6%) | 55 %  | 985  |
| Grain | Strzegom<br>Monachijski typ I  | 2 kg (25.6%)  | 79 %  | 16   |

### Hops

| Use for | Name     | Amount | Time     | Alpha acid |
|---------|----------|--------|----------|------------|
| Boil    | Chinook  | 60 g   | 60 min   | 13 %       |
| Boil    | Chinook  | 30 g   | 10 min   | 13 %       |
| Dry Hop | Izabella | 30 g   | 3 day(s) | 5.1 %      |

### Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11.5 g | Fermentis  |