

# Rye Stout

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **37**
- SRM **37.6**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **0 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.4 liter(s)**
- Total mash volume **23.2 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **17.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **13.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount         | Yield  | EBC |
|-------|-----------------------------|----------------|--------|-----|
| Grain | Strzegom Pilzneński         | 3 kg (51.7%)   | 80 %   | 4   |
| Grain | Fawcett - Pale Chocolate    | 0.5 kg (8.6%)  | 71 %   | 600 |
| Grain | Caraaroma                   | 0.25 kg (4.3%) | 78 %   | 400 |
| Grain | Weyermann - Chocolate Wheat | 0.35 kg (6%)   | 74 %   | 900 |
| Grain | Weyermann - Carafa I        | 0.1 kg (1.7%)  | 70 %   | 690 |
| Grain | Rye, Flaked                 | 1.6 kg (27.6%) | 78.3 % | 4   |

## Hops

| Use for | Name  | Amount | Time   | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil    | lunga | 25 g   | 60 min | 11 %       |
| Boil    | lunga | 10 g   | 20 min | 11 %       |
| Boil    | lunga | 40 g   | 1 min  | 11 %       |

## Yeasts

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

|                              |     |        |         |                  |
|------------------------------|-----|--------|---------|------------------|
| FM13 Irlandzkie<br>Ciemności | Ale | Liquid | 2000 ml | Fermentum Mobile |
|------------------------------|-----|--------|---------|------------------|