

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 |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

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|------------------------------|-----|--------|---------|------------------|
| FM13 Irlandzkie Ciemności | Ale | Liquid | 2000 ml | Fermentum Mobile |
|------------------------------|-----|--------|---------|------------------|