

Stout

- Gravity **15.9 BLG**
- ABV ---
- IBU **34**
- SRM **34.9**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **28.8 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **30.8 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **77 C**, Time **20 min**

Mash step by step

- Heat up **24 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **20 min** at **77C**
- Sparge using **11.7 liter(s)** of **76C** water or to achieve **28.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|--------|------|
| Grain | Simpsons - Maris Otter | 3.5 kg (51.1%) | 81 % | 6 |
| Grain | Weyermann - Rye Malt | 2 kg (29.2%) | 85 % | 7 |
| Grain | Strzegom Monachijski typ I | 0.3 kg (4.4%) | 79 % | 16 |
| Grain | Rye, Flaked | 0.3 kg (4.4%) | 78.3 % | 4 |
| Grain | Simpsons - Black Malt | 0.3 kg (4.4%) | 70 % | 1084 |
| Grain | Simpsons - Roasted Barley | 0.3 kg (4.4%) | 70 % | 1084 |
| Grain | Simpsons - Crystal Rye | 0.15 kg (2.2%) | 73 % | 177 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------|--------|--------|------------|
| Boil | Sorachi Ace | 35 g | 60 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 12.5 g | Safale |