

## Stout

- Gravity **10 BLG**
- ABV **4 %**
- IBU **34**
- SRM **23.4**
- Style **Dry Stout**

### Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.1 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.7 liter(s)**
- Total mash volume **14.3 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**
- Temp **75 C**, Time **10 min**

### Mash step by step

- Heat up **10.7 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **75C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **24.1 liter(s)** of wort

### Fermentables

| Type  | Name           | Amount         | Yield   | EBC  |
|-------|----------------|----------------|---------|------|
| Grain | Caramunich III | 0.15 kg (4.2%) | 79.7 %  | 140  |
| Grain | Chocolate Malt | 0.12 kg (3.4%) | 73.66 % | 1002 |
| Grain | CARA RUBY®     | 0.1 kg (2.8%)  | 76.64 % | 50   |
| Grain | Caramunich I   | 0.1 kg (2.8%)  | 77.54 % | 101  |
| Grain | PILSEN (2-Row) | 2.5 kg (70%)   | 80.62 % | 3    |
| Grain | MUNICH LIGHT®  | 0.3 kg (8.4%)  | 79.63 % | 15   |
| Grain | ROASTED BARLEY | 0.15 kg (4.2%) | 64.7 %  | 1202 |
| Grain | Crystal - Dark | 0.15 kg (4.2%) | 74.55 % | 220  |

### Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Fuggles | 60 g   | 60 min | 4.5 %      |

### Yeasts

| Name        | Type | Form   | Amount | Laboratory |
|-------------|------|--------|--------|------------|
| English Ale | Ale  | Liquid | 100 ml | ---        |