

Stout03

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **41**
- SRM **35.8**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **30.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.4 liter(s)**
- Total mash volume **28.8 liter(s)**

Steps

- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **22.4 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **30.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|-----------------------|---------------|-------|------|
| Grain | Pilzneński | 5 kg (67.6%) | 81 % | 4 |
| Grain | karmelowy 400 | 1 kg (13.5%) | 68 % | 400 |
| Grain | pszenica prażona 1393 | 0.2 kg (2.7%) | 70 % | 1393 |
| Grain | Czekoladowy | 0.2 kg (2.7%) | 68 % | 1000 |
| Adjunct | laktoza | 1 kg (13.5%) | --- % | 0 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------|--------|----------|------------|
| Boil | Vic Secret (AUS) | 30 g | 40 min | 19.2 % |
| Dry Hop | Motueka (NZ) | 30 g | 5 day(s) | 6.3 % |

Yeasts

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