

mk stout

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **28**
- SRM **36.4**

Batch size

- Expected quantity of finished beer **3.4 liter(s)**
- Trub loss **5 %**
- Size with trub loss **3.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **4.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **3.4 liter(s)**
- Total mash volume **4.2 liter(s)**

Steps

- Temp **63 C**, Time **40 min**
- Temp **66 C**, Time **20 min**

Mash step by step

- Heat up **3.4 liter(s)** of strike water to **68.3C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **66C**
- Sparge using **1.7 liter(s)** of **76C** water or to achieve **4.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------|----------------|-------|-----|
| Grain | Pale Malt (2 Row) Bel | 0.7 kg (83.3%) | 80 % | 6 |
| Grain | Chocolate Malt (US) | 0.04 kg (4.8%) | 60 % | 690 |
| Grain | Jęczmień palony | 0.1 kg (11.9%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil | Target | 4 g | 60 min | 10.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 3 g | Safale |