

Tomi_Stout_Milk

- Gravity **12.6 BLG**
- ABV ---
- IBU **34**
- SRM **36.5**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **6.5 %**
- Size with trub loss **16.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **20 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4.1 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **22.4 liter(s)**

Steps

- Temp **68 C**, Time **75 min**
- Temp **78 C**, Time **10 min**
- Temp **100 C**, Time **60 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **73.9C**
- Add grains
- Keep mash **75 min** at **68C**
- Keep mash **10 min** at **78C**
- Keep mash **60 min** at **100C**
- Sparge using **6.4 liter(s)** of **76C** water or to achieve **20 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 3 kg (68.2%) | 80 % | 5 |
| Grain | Strzegom Monachijski typ I | 0.5 kg (11.4%) | 79 % | 16 |
| Grain | Carahell | 0.25 kg (5.7%) | 77 % | 26 |
| Grain | Strzegom Czekoladowy jasny | 0.25 kg (5.7%) | 68 % | 400 |
| Grain | Strzegom Czekoladowy ciemny | 0.2 kg (4.5%) | 68 % | 1200 |
| Grain | Thomas Fawcet Chocolate | 0.2 kg (4.5%) | 68 % | 1202 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Cascade | 20 g | 60 min | 7.8 % |
| Boil | Cascade | 15 g | 30 min | 7.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|---------|------------|
| Safale S-04 | Ale | Dry | 17.25 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|--------|---------|--------|---------|--------|
| Flavor | Laktoza | 375 g | Boil | 15 min |