

Tomi_Stout_Milk

- Gravity **12.6 BLG**
- ABV **5.1 %**
- 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