

Milk stout

- Gravity **13.8 BLG**
- ABV ---
- IBU **20**
- SRM **49.8**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **0 %**
- Size with trub loss **20 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.8 liter(s)**
- Total mash volume **18.4 liter(s)**

Steps

- Temp **69 C**, Time **60 min**
- Temp **72 C**, Time **15 min**

Mash step by step

- Heat up **13.8 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **60 min** at **69C**
- Keep mash **15 min** at **72C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------|----------------|--------|------|
| Grain | Weyermann - Pale Ale Malt | 3.2 kg (66%) | 85 % | 8 |
| Grain | Weyermann - Carafa III | 0.1 kg (2.1%) | 70 % | 1024 |
| Grain | Roasted Barley | 0.3 kg (6.2%) | 55 % | 799 |
| Grain | Barley, Flaked | 0.5 kg (10.3%) | 70 % | 4 |
| Grain | Strzegom Czekoladowy 1200 | 0.2 kg (4.1%) | 68 % | 1202 |
| Grain | Cara Blonde - Castle Malting | 0.3 kg (6.2%) | 78 % | 150 |
| Sugar | Milk Sugar (Lactose) | 0.25 kg (5.2%) | 76.1 % | 0 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil | Challenger | 20 g | 55 min | 7 % |
| Boil | Challenger | 10 g | 10 min | 7 % |

Yeasts

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

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------|--------|-----------|-----------|
| Flavor | Oak Chips | 20 g | Secondary | 80 day(s) |