

Milk Stout #1

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **15**
- SRM **31.1**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.72 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20.5 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **60 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **75.6C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **60 min** at **72C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **23.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 3.2 kg (58.2%) | 80 % | 5 |
| Grain | Płatki owsiane | 1.5 kg (27.3%) | 85 % | 3 |
| Grain | Caraaroma | 0.3 kg (5.5%) | 78 % | 400 |
| Grain | Carafa | 0.2 kg (3.6%) | 70 % | 664 |
| Grain | Jęczmień palony | 0.3 kg (5.5%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------|--------|--------|------------|
| Boil | English Golding | 30 g | 55 min | 4.8 % |

Yeasts

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

Extras

| Type | Name | Amount | Use for | Time |
|-------|---------|--------|---------|--------|
| Spice | Laktoza | 1000 g | Boil | 15 min |