

Milk stout wroc.

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **25**
- SRM **36.5**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.9 liter(s)**
- Total mash volume **11.8 liter(s)**

Steps

- Temp **70 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **8.9 liter(s)** of strike water to **78.3C**
- Add grains
- Keep mash **60 min** at **70C**
- Keep mash **10 min** at **78C**
- Sparge using **9.3 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|--------|------|
| Grain | Viking Pale Ale malt | 2.5 kg (72.5%) | 80 % | 5 |
| Grain | Extra black | 0.25 kg (7.2%) | 65 % | 1400 |
| Grain | Kawowy Castlemalting | 0.2 kg (5.8%) | 74 % | 500 |
| Sugar | Milk Sugar (Lactose) | 0.5 kg (14.5%) | 76.1 % | 0 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|------------|----------|--------|--------|------------|
| First Wort | Amarillo | 23 g | 20 min | 9.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------------|------|--------|--------|------------|
| WLP519 Stranda Kveik Ale | Ale | Liquid | 40 ml | White Labs |