

## Fruit milk stout

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- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **25**
- SRM **37.9**
- Style **Sweet Stout**

### Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.5 liter(s)**

### Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.4 liter(s)**
- Total mash volume **11.2 liter(s)**

### Steps

- Temp **64 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **8.4 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **10.9 liter(s)** of **76C** water or to achieve **16.5 liter(s)** of wort

### Fermentables

| Type  | Name                             | Amount         | Yield  | EBC  |
|-------|----------------------------------|----------------|--------|------|
| Grain | Castle Pale Ale                  | 1.7 kg (51.5%) | 80 %   | 8    |
| Grain | Castlemalting - Cara Clair       | 0.4 kg (12.1%) | 78 %   | 4    |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.2 kg (6.1%)  | 73 %   | 1001 |
| Grain | Strzegom Czekoladowy jasny       | 0.3 kg (9.1%)  | 68 %   | 400  |
| Grain | Jęczmień palony                  | 0.2 kg (6.1%)  | 55 %   | 985  |
| Sugar | Milk Sugar (Lactose)             | 0.5 kg (15.2%) | 76.1 % | 0    |

### Hops

| Use for | Name  | Amount | Time   | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil    | lunga | 14 g   | 60 min | 11 %       |

### Yeasts

| Name  | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| US-05 | Ale  | Dry  | 11 g   | ---        |