

## Milk Stout

- Gravity **12.1 BLG**
- ABV ---
- IBU **50**
- SRM **30.3**
- Style **Sweet Stout**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 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 **11.6 liter(s)**
- Total mash volume **15.4 liter(s)**

### Steps

- Temp **60 C**, Time **75 min**
- Temp **67 C**, Time **0 min**

### Mash step by step

- Heat up **11.6 liter(s)** of strike water to **66.6C**
- Add grains
- Keep mash **75 min** at **60C**
- Keep mash **0 min** at **67C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

| Type  | Name                             | Amount         | Yield  | EBC  |
|-------|----------------------------------|----------------|--------|------|
| Grain | Viking Pale Ale malt             | 2 kg (46%)     | 80 %   | 5    |
| Sugar | Milk Sugar (Lactose)             | 0.5 kg (11.5%) | 76.1 % | 0    |
| Grain | Pszeniczny                       | 0.4 kg (9.2%)  | 85 %   | 4    |
| Grain | Oats, Flaked                     | 0.4 kg (9.2%)  | 80 %   | 2    |
| Grain | Barley, Flaked                   | 0.4 kg (9.2%)  | 70 %   | 4    |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.2 kg (4.6%)  | 73 %   | 1001 |
| Grain | Strzegom pszenica prażona        | 0.2 kg (4.6%)  | 70 %   | 1000 |
| Grain | Strzegom Czekoladowy jasny       | 0.2 kg (4.6%)  | 68 %   | 400  |
| Grain | Carafa II                        | 0.05 kg (1.1%) | 70 %   | 812  |

### Hops

| Use for | Name     | Amount | Time     | Alpha acid |
|---------|----------|--------|----------|------------|
| Boil    | Magnum   | 30 g   | 60 min   | 13.5 %     |
| Dry Hop | boadicea | 30 g   | 3 day(s) | 8.5 %      |

### Yeasts

| Name                         | Type | Form   | Amount  | Laboratory       |
|------------------------------|------|--------|---------|------------------|
| FM13 Irlandzkie<br>Ciemności | Ale  | Liquid | 1000 ml | Fermentum Mobile |