

## milk stout

- Gravity **20.5 BLG**
- ABV **9 %**
- IBU **55**
- SRM **60.6**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **26.2 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **21.6 liter(s)**

### Steps

- Temp **64 C**, Time **45 min**
- Temp **68 C**, Time **20 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **14.4 liter(s)** of strike water to **75C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **20 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **19 liter(s)** of **76C** water or to achieve **26.2 liter(s)** of wort

### Fermentables

| Type  | Name                                   | Amount        | Yield  | EBC  |
|-------|----------------------------------------|---------------|--------|------|
| Grain | Pale Malt (2 Row) Bel                  | 5 kg (61%)    | 80 %   | 6    |
| Grain | Fawcett -<br>Pszeniczny<br>Czekoladowy | 1 kg (12.2%)  | 73 %   | 780  |
| Grain | Carafa III                             | 0.5 kg (6.1%) | 70 %   | 1034 |
| Grain | Jęczmień palony                        | 0.3 kg (3.7%) | 55 %   | 985  |
| Sugar | Milk Sugar (Lactose)                   | 1 kg (12.2%)  | 76.1 % | 0    |
| Grain | Płatki owsiane                         | 0.4 kg (4.9%) | 85 %   | 3    |

### Hops

| Use for | Name  | Amount | Time   | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil    | lunga | 60 g   | 70 min | 11 %       |

### Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 200 ml | Fermentis  |

### Extras

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

| Type  | Name            | Amount | Use for   | Time     |
|-------|-----------------|--------|-----------|----------|
| Spice | ZIARNO KAKAOWCA | 20 g   | Secondary | 5 day(s) |