

## #9 Milk Stout

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- Gravity **14 BLG**
- ABV ---
- IBU **27**
- SRM **40**
- Style **Sweet Stout**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **10 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **34.5 liter(s)**

### Mash information

- Mash efficiency **88 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **13.9 liter(s)**
- Total mash volume **19.4 liter(s)**

### Steps

- Temp **65 C**, Time **70 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **13.9 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **70 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **26.2 liter(s)** of **76C** water or to achieve **34.5 liter(s)** of wort

### Fermentables

| Type    | Name                      | Amount         | Yield | EBC |
|---------|---------------------------|----------------|-------|-----|
| Grain   | Weyermann - Pale Ale Malt | 3.5 kg (56.9%) | 85 %  | 7   |
| Grain   | Caraaroma                 | 0.5 kg (8.1%)  | 78 %  | 200 |
| Grain   | Strzegom Czekoladowy 400  | 0.5 kg (8.1%)  | 68 %  | 400 |
| Grain   | Pszeniczny                | 0.6 kg (9.8%)  | 85 %  | 4   |
| Grain   | Jęczmień palony           | 0.45 kg (7.3%) | 65 %  | 730 |
| Adjunct | Płatki jęczmienne         | 0.6 kg (9.8%)  | 10 %  | 0   |

### Hops

| Use for | Name          | Amount | Time   | Alpha acid |
|---------|---------------|--------|--------|------------|
| Boil    | Kent Goldings | 25 g   | 60 min | 6 %        |
| Boil    | Fuggles       | 10 g   | 40 min | 4.3 %      |
| Boil    | Kent Goldings | 25 g   | 20 min | 6 %        |
| Boil    | Fuggles       | 15 g   | 15 min | 4.3 %      |

### Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|             |     |     |        |        |
|-------------|-----|-----|--------|--------|
| Safale S-04 | Ale | Dry | 11.5 g | Safale |
|-------------|-----|-----|--------|--------|

### Extras

| Type   | Name           | Amount | Use for   | Time      |
|--------|----------------|--------|-----------|-----------|
| Flavor | Laktoza        | 700 g  | Boil      | 10 min    |
| Fining | Mech Irlandzki | 5 g    | Boil      | 10 min    |
| Flavor | Laktoza        | 300 g  | Secondary | 14 day(s) |