

## #79 Milk Stout

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **33**
- SRM **33.8**
- Style **Dry Stout**

### Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.8 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.1 liter(s) / kg**
- Mash size **20.2 liter(s)**
- Total mash volume **26.7 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **20.2 liter(s)** of strike water to **73.4C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **29.8 liter(s)** of wort

### Fermentables

| Type  | Name                       | Amount        | Yield  | EBC |
|-------|----------------------------|---------------|--------|-----|
| Grain | Weyermann - Pale Ale Malt  | 5 kg (66.7%)  | 85 %   | 7   |
| Grain | Jęczmień palony            | 0.5 kg (6.7%) | 55 %   | 985 |
| Grain | Strzegom Czekoladowy jasny | 0.5 kg (6.7%) | 68 %   | 400 |
| Grain | Płatki owsiane             | 0.3 kg (4%)   | 85 %   | 3   |
| Grain | Caraaroma                  | 0.2 kg (2.7%) | 78 %   | 400 |
| Sugar | Milk Sugar (Lactose)       | 1 kg (13.3%)  | 76.1 % | 0   |

### Hops

| Use for | Name   | Amount | Time   | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil    | Magnum | 40 g   | 60 min | 10 %       |

### Yeasts

| Name                 | Type | Form | Amount | Laboratory |
|----------------------|------|------|--------|------------|
| Danstar - Nottingham | Ale  | Dry  | 13.2 g | Danstar    |