

## #17 Sweet Milk Stout

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **24**
- SRM **30.2**
- Style **Sweet Stout**

### Batch size

- Expected quantity of finished beer **22.5 liter(s)**
- Trub loss **0 %**
- Size with trub loss **22.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.3 liter(s)**

### Mash information

- Mash efficiency **92 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **22.6 liter(s)**

### Steps

- Temp **52 C**, Time **15 min**
- Temp **63 C**, Time **20 min**
- Temp **73 C**, Time **30 min**

### Mash step by step

- Heat up **17 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **20 min** at **63C**
- Keep mash **30 min** at **73C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **27.3 liter(s)** of wort

### Fermentables

| Type  | Name                               | Amount         | Yield | EBC  |
|-------|------------------------------------|----------------|-------|------|
| Grain | Słodownia Strzegom - karmelowy 300 | 0.5 kg (8.8%)  | 73 %  | 300  |
| Grain | Weyermann - jęczmień palony        | 0.2 kg (3.5%)  | 80 %  | 1100 |
| Grain | Słodownia Strzegom - karmelowy 600 | 0.3 kg (5.3%)  | 69 %  | 400  |
| Grain | Malteurop - pilzneński             | 2.5 kg (44.2%) | 80 %  | 4    |
| Grain | Słodownia Strzegom - monachijski I | 2 kg (35.4%)   | 79 %  | 12   |
| Grain | Weyermann - Carafa I               | 0.15 kg (2.7%) | 70 %  | 689  |

### Hops

| Use for | Name   | Amount | Time   | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil    | Nugget | 10 g   | 60 min | 15.3 %     |
| Boil    | Nugget | 10 g   | 30 min | 15.3 %     |

### Yeasts

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

|                             |     |         |       |                  |
|-----------------------------|-----|---------|-------|------------------|
| FM13 - Irlandzkie ciemno?ci | Ale | Culture | 200 g | Fermentum Mobile |
|-----------------------------|-----|---------|-------|------------------|

### Extras

| Type  | Name           | Amount | Use for | Time   |
|-------|----------------|--------|---------|--------|
| Other | Płatki owsiane | 500 g  | Mash    | 60 min |
| Other | Laktoza        | 500 g  | Boil    | 15 min |