

## #61 Milk Stout IV

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **30**
- SRM **28.5**
- Style **Sweet Stout**

### Batch size

- Expected quantity of finished beer **9 liter(s)**
- Trub loss **5 %**
- Size with trub loss **9.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **11.1 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.8 liter(s) / kg**
- Mash size **8.1 liter(s)**
- Total mash volume **10.2 liter(s)**

### Steps

- Temp **68 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **2 min**

### Mash step by step

- Heat up **8.1 liter(s)** of strike water to **74.3C**
- Add grains
- Keep mash **40 min** at **68C**
- Keep mash **30 min** at **72C**
- Keep mash **2 min** at **77C**
- Sparge using **5.1 liter(s)** of **76C** water or to achieve **11.1 liter(s)** of wort

### Fermentables

| Type  | Name                               | Amount          | Yield  | EBC  |
|-------|------------------------------------|-----------------|--------|------|
| Grain | Briess - Pale Ale Malt             | 1.5 kg (63.3%)  | 80 %   | 7    |
| Grain | Grodziski pszeniczny wędzony dębem | 0.17 kg (7.2%)  | 80 %   | 3    |
| Grain | Płatki owsiane                     | 0.15 kg (6.3%)  | 85 %   | 3    |
| Grain | Strzegom Czekoladowy jasny         | 0.08 kg (3.4%)  | 68 %   | 400  |
| Grain | Strzegom Czekoladowy ciemny        | 0.06 kg (2.5%)  | 68 %   | 1200 |
| Grain | Abbey Malt Weyermann               | 0.06 kg (2.5%)  | 75 %   | 45   |
| Grain | Weyermann - Carafa II Special      | 0.06 kg (2.5%)  | 65 %   | 1150 |
| Grain | Strzegom Barwiący                  | 0.04 kg (1.7%)  | 68 %   | 1300 |
| Sugar | Milk Sugar (Lactose)               | 0.25 kg (10.5%) | 76.1 % | 0    |

### Hops

| Use for | Name  | Amount | Time   | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil    | lunga | 8 g    | 50 min | 11 %       |

|                     |          |      |       |       |
|---------------------|----------|------|-------|-------|
| Aroma (end of boil) | Cashmere | 27 g | 5 min | 6.7 % |
| Aroma (end of boil) | lunga    | 4 g  | 5 min | 11 %  |

## Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 70 ml  | ---        |

## Extras

| Type   | Name      | Amount | Use for | Time   |
|--------|-----------|--------|---------|--------|
| Fining | WhirlFloc | 1 g    | Boil    | 12 min |