

milk stout

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **52**
- SRM **36.1**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **27.4 liter(s)**

Steps

- Temp **69 C**, Time **60 min**
- Temp **70 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **21.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **69C**
- Keep mash **15 min** at **70C**
- Keep mash **10 min** at **78C**
- Sparge using **10.3 liter(s)** of **76C** water or to achieve **25.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 3.6 kg (59%) | 80 % | 5 |
| Grain | Strzegom Monachijski typ II | 0.7 kg (11.5%) | 79 % | 22 |
| Grain | Pszeniczny | 0.5 kg (8.2%) | 85 % | 4 |
| Grain | Płatki owsiane | 0.5 kg (8.2%) | 85 % | 3 |
| Grain | Chocolate Malt (UK) | 0.3 kg (4.9%) | 73 % | 887 |
| Grain | Weyermann - Carafa II | 0.3 kg (4.9%) | 70 % | 837 |
| Grain | Jęczmień palony | 0.2 kg (3.3%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|-----------|------------|
| Boil | Nugget | 35 g | 70 min | 13 % |
| Boil | Tillicum | 15 g | 10 min | 13 % |
| Dry Hop | Tillicum | 10 g | 10 day(s) | 13 % |
| Dry Hop | Amarillo | 10 g | 10 day(s) | 9.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|-------------|-------------|---------------|-------------------|
| Safale US-05 | Ale | Dry | 10 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-------------|---------------|----------------|-------------|
| Flavor | malina | 2000 g | Secondary | 10 day(s) |
| Flavor | laktoza | 250 g | Boil | 10 min |