

Stout Mleczny

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **23**
- SRM **39.2**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **5 %**
- Size with trub loss **28.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **34.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **28 liter(s)**

Steps

- Temp **68 C**, Time **70 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **20 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **22.2 liter(s)** of **76C** water or to achieve **34.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|--------------|--------|------|
| Grain | Viking Pale Ale malt | 5 kg (55.6%) | 80 % | 5 |
| Grain | Carafa II | 0 kg | 70 % | 1100 |
| Sugar | Iaktoza | 1 kg (11.1%) | 76.1 % | 0 |
| Grain | Viking Czekoladowy ciemny | 1 kg (11.1%) | 67 % | 1100 |
| Grain | Monachijski | 2 kg (22.2%) | 80 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 30 g | 60 min | 6 % |
| Boil | Lublin (Lubelski) | 70 g | 10 min | 6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11.5 g | Fermentis |