

# 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