

# Milk Stout

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **27**
- SRM **30.4**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **23.2 liter(s)**
- Total mash volume **29 liter(s)**

## Steps

- Temp **68 C**, Time **30 min**
- Temp **72 C**, Time **20 min**
- Temp **74 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **23.2 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **30 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **74C**
- Keep mash **10 min** at **78C**
- Sparge using **7.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3.6 kg (62.1%)	79 %	6
Grain	Pszeniczny	0.5 kg (8.6%)	85 %	4
Grain	Strzegom Karmel 30	0.7 kg (12.1%)	75 %	30
Grain	Płatki owsiane	0.5 kg (8.6%)	85 %	3
Grain	Strzegom Barwiący	0.15 kg (2.6%)	68 %	1300
10 min				
Grain	Jęczmień palony	0.35 kg (6%)	55 %	985
10 min				

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	10 %
Boil	Lublin (Lubelski)	10 g	20 min	4.3 %
Boil	Saaz (Czech Republic)	10 g	20 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Flavor	Laktoza	800 g	Boil	20 min