

# Milk Stout

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **22**
- SRM **36.4**
- 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 **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **20.5 liter(s)**
- Total mash volume **26.3 liter(s)**

## Steps

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

## Mash step by step

- Heat up **20.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **30 min** at **68C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **10.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (68.4%)	81 %	4
Grain	Strzegom Karmel 150	0.7 kg (12%)	75 %	150
Grain	Jęczmień palony	0.5 kg (8.5%)	55 %	985
Grain	Płatki owsiane	0.5 kg (8.5%)	85 %	3
Grain	Fawcett - Pszeniczny Czekoladowy	0.15 kg (2.6%)	73 %	1001

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	16.67 g	60 min	10 %
Boil	Lublin (Lubelski)	16.67 g	15 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	10 g	Safale

## Extras

Type	Name	Amount	Use for	Time
Flavor	laktoza	500 g	Boil	15 min
Flavor	kawa	100 g	Boil	0 min