

# Milk Stout #1

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- Gravity **14.7 BLG**
- ABV ---
- IBU **39**
- SRM **40**
- 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.1 liter(s)**
- Total mash volume **21.4 liter(s)**

## Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **20 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **16.1 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **14.6 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3.6 kg (67.3%)	85 %	7
Grain	Weyermann - Carawheat	0.25 kg (4.7%)	77 %	97
Grain	Jęczmień palony	0.35 kg (6.5%)	55 %	985
Grain	Strzegom Karmel 150	0.5 kg (9.3%)	75 %	150
Grain	Strzegom Barwiący	0.15 kg (2.8%)	68 %	1300
Grain	Strzegom pszeniczny	0.5 kg (9.3%)	81 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	9.5 %
Boil	Lublin (Lubelski)	30 g	20 min	3.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Safale s-04	Ale	Dry	12 g	---
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### Extras

Type	Name	Amount	Use for	Time
Other	Płatki owsiane	500 g	Mash	---
Flavor	Laktoza	800 g	Boil	40 min

### Notes

- Płatki owsiane od początku zacierania

Słody ciemne po 20 min w 72 st

Laktoza w 40 min gotowania

120g glukozy na 20l

*Apr 3, 2016, 8:59 PM*