

# Milk Stout

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **17**
- SRM **65.5**
- Style **Foreign Extra 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 **18.3 liter(s)**
- Total mash volume **24.4 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **75 C**, Time **15 min**

## Mash step by step

- Heat up **18.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **15 min** at **75C**
- Sparge using **13.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (45.5%)	80 %	5
Grain	płatki jęczmienne	0.9 kg (13.6%)	60 %	4
Grain	Strzegom Czekoladowy jasny	1 kg (15.2%)	68 %	400
Grain	Strzegom Czekoladowy ciemny	1 kg (15.2%)	68 %	1200
Grain	Jęczmień palony	0.2 kg (3%)	55 %	985
Adjunct	laktoza	0.5 kg (7.6%)	--- %	---
dodana do gotowania - ostatnie 15 minut				

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	20 g	60 min	5.5 %
Boil	Fuggles	30 g	10 min	5.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Lallemand - Lalbrew Nottingham	Ale	Dry	15 g	Lallemand
starter drożdżowy 1l - 135g ekstrakt słodowy jasny - suchy, szczypta płatki drożdżowe nieaktywne				

## Extras

Type	Name	Amount	Use for	Time
Flavor	Laktoza	500 g	Boil	15 min