

# Milk Stout

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **33**
- SRM **34.4**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **24.5 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.8 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.1 liter(s)**

## Steps

- Temp **68 C**, Time **30 min**
- Temp **66 C**, Time **30 min**
- Temp **64 C**, Time **30 min**
- Temp **75.6 C**, Time **5 min**

## Mash step by step

- Heat up **17.5 liter(s)** of strike water to **69.8C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **66C**
- Keep mash **30 min** at **68C**
- Keep mash **5 min** at **75.6C**
- Sparge using **11.6 liter(s)** of **76C** water or to achieve **24.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	1.75 kg (34.3%)	81 %	4
Grain	Monachijski	1.6 kg (31.4%)	80 %	16
Grain	Strzegom Czekoladowy jasny	0.25 kg (4.9%)	68 %	400
Grain	Strzegom Karmel 600	0.25 kg (4.9%)	68 %	601
Grain	KAWOWY	0.2 kg (3.9%)	68 %	500
Grain	JĘCZMIEN PALONY	0.25 kg (4.9%)	68 %	1150
Grain	Płatki owsiane	0.3 kg (5.9%)	85 %	3
Sugar	Milk Sugar (Lactose)	0.5 kg (9.8%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	70 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Safale S-04	Ale	Dry	11 g	Safale
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