

# Milk Stout #1

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **15**
- SRM **31.1**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.72 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20.5 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **60 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **75.6C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **60 min** at **72C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **23.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.2 kg (58.2%)	80 %	5
Grain	Płatki owsiane	1.5 kg (27.3%)	85 %	3
Grain	Caraaroma	0.3 kg (5.5%)	78 %	400
Grain	Carafa	0.2 kg (3.6%)	70 %	664
Grain	Jęczmień palony	0.3 kg (5.5%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	English Golding	30 g	55 min	4.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale

## Extras

Type	Name	Amount	Use for	Time
Spice	Laktoza	1000 g	Boil	15 min