

# Milk stout

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **31**
- SRM **28.7**
- Style **Dry 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 **17.4 liter(s)**
- Total mash volume **23.2 liter(s)**

## Steps

- Temp **60 C**, Time **1 min**
- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **17.4 liter(s)** of strike water to **66.7C**
- Add grains
- Keep mash **1 min** at **60C**
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **13.7 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	5 kg (86.2%)	80 %	5
Grain	Słód Caramunich Typ II Weyermann	0.3 kg (5.2%)	73 %	120
Grain	Weyermann - Carafa I	0.3 kg (5.2%)	70 %	690
Grain	castlemalting black	0.2 kg (3.4%)	--- %	1350

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %

## Extras

Type	Name	Amount	Use for	Time
Fining	mech	10 g	Boil	15 min
Flavor	laktoza	500 g	Boil	15 min