

# Chocolate Milk Stout

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **20**
- SRM **27.2**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **22.5 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.7 liter(s)**

## Mash information

- Mash efficiency **83 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

## Steps

- Temp **63.5 C**, Time **45 min**
- Temp **71.5 C**, Time **45 min**

## Mash step by step

- Heat up **15.6 liter(s)** of strike water to **70.7C**
- Add grains
- Keep mash **45 min** at **63.5C**
- Keep mash **45 min** at **71.5C**
- Sparge using **19.3 liter(s)** of **76C** water or to achieve **29.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.5 kg (28.9%)	80 %	5
Grain	Buiscuit malt	1.5 kg (28.9%)	85 %	8
Grain	Wheat Malt	0.7 kg (13.5%)	85 %	5
Grain	Barley, Flaked	0.493 kg (9.5%)	70 %	4
Grain	Caramel/Crystal Malt - 120L	0.5 kg (9.6%)	72 %	236
Grain	Chocolate Malt (UK)	0.5 kg (9.6%)	73 %	887

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	25 g	80 min	5.1 %
Boil	East Kent Goldings	25 g	20 min	5.1 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
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Flavor	lactose	500 g	Boil	10 min
+1.4 BLG (0,28 BLG na 100g)				
Fining	irish moss	10 g	Boil	10 min

## Notes

- white malts and flaked barley mashed for 45 mins in 62-65 Celsius  
dark malts mashed for the next 45 mins in 70-73 Celsius  
mashed-out in 79C

boiled for 60 min + 20 min break (no gas) before cooled down

13.5 BRIX after boiling (13 BLG)

8.8 BRIX after 1 week (5.5 BLG => 4.2 ABV) (19-20 Celsius)

bottled 14.06.2018, carbonation volume => 1.715 (84g per 23l)

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