

# Chocolate Vanilla milk stout

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU ---
- SRM **30.9**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.1 liter(s)**
- Total mash volume **21.5 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **16.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.1 kg (72.4%)	81 %	4
Grain	Karmelowy Czerwony	0.22 kg (3.9%)	75 %	59
Grain	Weyermann Caramunich 3	0.23 kg (4.1%)	76 %	150
Grain	Czekoladowy	0.23 kg (4.1%)	60 %	788
Sugar	Bestmalz - Special X	0.28 kg (4.9%)	75 %	400
Grain	Extra black	0.13 kg (2.3%)	65 %	1400
Grain	Płatki pszeniczne	0.47 kg (8.3%)	60 %	3

## Hops

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

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M42 New World Strong Ale	Ale	Dry	20 g	Mangrove Jack's

## Extras

Type	Name	Amount	Use for	Time
Other	Laktoza	700 g	Boil	10 min