

# chocolate milk stout

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **33**
- SRM **31.7**
- Style **Sweet 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 **3.5 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **23.9 liter(s)**

## Steps

- Temp **66 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **18.6 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **50 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **12 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3.5 kg (66%)	85 %	7
Grain	Strzegom Monachijski typ II	0.5 kg (9.4%)	79 %	22
Grain	Carafa III	0.2 kg (3.8%)	70 %	1034
Grain	Jęczmień palony	0.3 kg (5.7%)	55 %	985
Grain	Strzegom Karmel 30	0.2 kg (3.8%)	75 %	30
Grain	Strzegom Czekoladowy jasny	0.2 kg (3.8%)	68 %	400
Grain	Barley, Flaked	0.4 kg (7.5%)	70 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Phoenix	30 g	50 min	11 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Other	laktoza	500 g	Boil	15 min
Spice	ziarno kakaowca	100 g	Secondary	10 day(s)