

# MILK STOUT

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **25**
- SRM **22.5**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.6 liter(s)**
- Total mash volume **23.5 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **17.6 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg (59.5%)	80 %	5
Grain	Strzegom Monachijski typ I	1 kg (17%)	79 %	16
Grain	Strzegom Karmel 150	0.3 kg (5.1%)	75 %	150
Grain	Brown Malt (British Chocolate)	0.2 kg (3.4%)	70 %	128
Grain	Black Barley (Roast Barley)	0.178 kg (3%)	55 %	985
Grain	Carafa I	0.2 kg (3.4%)	70 %	664
Grain	Płatki owsiane	0.5 kg (8.5%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lubelski	30 g	60 min	2.6 %
Boil	citra	15 g	60 min	12 %

## Extras

Type	Name	Amount	Use for	Time
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Other	laktoza	500 g	Boil	15 min
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