

## Milk stout

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- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **22**
- SRM **32.1**
- 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 **23.2 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18.6 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **67 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **14 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **10 min** at **67C**
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **13.9 liter(s)** of **76C** water or to achieve **23.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	3.7 kg (71.8%)	80 %	7
Grain	Strzegom Karmel 300	0.4 kg (7.8%)	70 %	299
Grain	Briess - Chocolate Malt	0.35 kg (6.8%)	60 %	690
Grain	Jęczmień palony	0.2 kg (3.9%)	55 %	985
Sugar	Milk Sugar (Lactose)	0.5 kg (9.7%)	76.1 %	0

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Northdown	25 g	50 min	8.2 %

### Yeasts

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

### Extras

Type	Name	Amount	Use for	Time
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Flavor	płatki drożdżowe high vanilla	35 g	Secondary	7 day(s)
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