

# Milk Stout

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **16**
- SRM **38.9**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.4 liter(s)**
- Total mash volume **15.2 liter(s)**

## Steps

- Temp **50 C**, Time **10 min**
- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **11.4 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **11.4 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	1 kg (23.8%)	80 %	4
Grain	Strzegom Monachijski typ I	2 kg (47.6%)	79 %	16
Grain	Strzegom Czekoladowy jasny	0.2 kg (4.8%)	68 %	400
Grain	Strzegom Karmel 600	0.2 kg (4.8%)	68 %	601
Grain	Chocolate Malt (UK)	0.2 kg (4.8%)	73 %	1200
Grain	Carafa	0.2 kg (4.8%)	70 %	800
Sugar	Milk Sugar (Lactose)	0.4 kg (9.5%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Tradition	20 g	60 min	5 %
Boil	Hallertau Tradition	10 g	10 min	5 %

## Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
Safale S-04	Ale	Dry	10 g	Fermentis

### **Extras**

<b>Type</b>	<b>Name</b>	<b>Amount</b>	<b>Use for</b>	<b>Time</b>
Other	laktoza	400 g	Boil	10 min