

# milk stout homebeer

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **23**
- SRM **46.8**

## Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **2 %**
- Size with trub loss **11.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **13.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.1 liter(s)**
- Total mash volume **10.8 liter(s)**

## Steps

- Temp **69 C**, Time **0 min**
- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **8.1 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **69C**
- Keep mash **0 min** at **78C**
- Sparge using **8.4 liter(s)** of **76C** water or to achieve **13.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	1.5 kg (55.6%)	79 %	6
Grain	Strzegom Pilzneński	0.5 kg (18.5%)	80 %	4
Grain	Jęczmień palony	0.15 kg (5.6%)	55 %	985
Grain	Strzegom Czekoladowy ciemny	0.2 kg (7.4%)	68 %	1200
Grain	Strzegom Barwiący	0.15 kg (5.6%)	68 %	1300
Grain	Płatki owsiane	0.2 kg (7.4%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	20 g	60 min	5.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale

## Extras

Type	Name	Amount	Use for	Time
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Other	laktoza	250 g	Boil	0 min
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