

# Milk Stout I

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **37**
- SRM **41.1**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

## Mash information

- Mash efficiency **76 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **9.1 liter(s)**
- Total mash volume **11.7 liter(s)**

## Steps

- Temp **62 C**, Time **40 min**
- Temp **78 C**, Time **0 min**
- Temp **72 C**, Time **20 min**

## Mash step by step

- Heat up **9.1 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **6.2 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale	1.6 kg (61.5%)	80 %	6
Grain	Weyermann - Monachijski II	0.3 kg (11.5%)	80 %	28
Grain	Płatki jęczmienne błyskawiczne	0.3 kg (11.5%)	75 %	3
Grain	Weyermann - Pszoniczny czekoladowy	0.2 kg (7.7%)	30 %	1050
Grain	Weyermann - Jęczmień palony	0.2 kg (7.7%)	30 %	1150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	PL lunga	10 g	60 min	12.5 %
Boil	PL lunga	15 g	5 min	12.5 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Other	Laktoza	250 g	Boil	5 min

## Notes

- Ciemne słody na początku przerwy 72 st.  
*Sep 24, 2017, 8:17 AM*