

# Milk Stout

- Gravity **14.5 BLG**
- ABV ---
- IBU **45**
- SRM **48.3**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **11 %**
- Size with trub loss **23.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **26 liter(s)**

## Mash information

- Mash efficiency **92 %**
- Liquor-to-grist ratio **3.1 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **20.3 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **15.3 liter(s)** of strike water to **72.3C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **5 min** at **78C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **26 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	3.7 kg (74.7%)	78 %	4
Grain	Czekoladowy	0.35 kg (7.1%)	85 %	887
Grain	Simpsons - Coffee Malt	0.3 kg (6.1%)	80 %	296
Grain	Strzegom Karmel	0.4 kg (8.1%)	80 %	299
Grain	Jęczmień palony	0.2 kg (4%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Northern Brewer	25 g	60 min	8.5 %
Boil	Magnum	25 g	25 min	13.5 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Other	laktoza	500 g	Boil	10 min

## Notes

- Laktoza podbija ekstrakt początkowy brzezki do 16 Blg  
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