

# Milk Stout

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **26**
- SRM **34.5**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.5 liter(s)**
- Total mash volume **19.4 liter(s)**

## Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **14.5 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4 kg (82.5%)	79 %	6
Grain	Strzegom Karmel 300	0.3 kg (6.2%)	70 %	299
Grain	Jęczmień palony	0.3 kg (6.2%)	55 %	985
Grain	Strzegom Czekoladowy ciemny	0.25 kg (5.2%)	68 %	1200

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	15 g	60 min	15.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Slant	250 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Other	Laktoza	500 g	Boil	60 min