

# stout mleczny

- Gravity **14.7 BLG**
- ABV ---
- IBU **38**
- SRM **34.6**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **22.6 liter(s)**

## Steps

- Temp **68 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **17 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **40 min** at **68C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **20.4 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3.5 kg (52.6%)	79 %	6
Grain	Strzegom Pszeniczny	0.5 kg (7.5%)	81 %	6
Grain	Strzegom Karmel 600	0.25 kg (3.8%)	68 %	601
Grain	Strzegom Czekoladowy 400	0.5 kg (7.5%)	68 %	400
Grain	Barley, Flaked	0.4 kg (6%)	70 %	4
Grain	Strzegom Barwiący	0.1 kg (1.5%)	68 %	1300
Sugar	Milk Sugar (Lactose)	1 kg (15%)	76.1 %	0
Grain	Rye, Flaked	0.4 kg (6%)	78.3 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	30 g	60 min	11 %
Boil	Lublin (Lubelski)	30 g	30 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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us-05	Ale	Slant	20 ml	Danstar
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