

# stout mleczny

- Gravity **14.5 BLG**
- ABV ---
- IBU **22**
- SRM **40**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **10 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **32.3 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **66 C**, Time **50 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **50 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **20.3 liter(s)** of **76C** water or to achieve **32.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (59.3%)	81 %	4
Grain	Strzegom Karmel 600	0.5 kg (7.4%)	68 %	601
Grain	Strzegom Barwiący	0.5 kg (7.4%)	68 %	1300
Grain	Monachijski	0.5 kg (7.4%)	80 %	16
Adjunct	płatki jęczmienne	0.25 kg (3.7%)	--- %	---
Grain	Jęczmień palony	0.5 kg (7.4%)	55 %	985
Sugar	Milk Sugar (Lactose)	0.5 kg (7.4%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	60 min	10 %
Aroma (end of boil)	Citra	10 g	30 min	12 %
Aroma (end of boil)	Citra	5 g	10 min	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
browin	Ale	Dry	7 g	---