

# Milk stout

- Gravity **19.8 BLG**
- ABV **8.7 %**
- IBU **25**
- SRM **20.7**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **50.6 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **31.6 liter(s)**
- Total mash volume **44.3 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**

## Mash step by step

- Heat up **31.6 liter(s)** of strike water to **76.4C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **31.7 liter(s)** of **76C** water or to achieve **50.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	8.5 kg (58%)	81 %	4
Grain	Monachijski	3.2 kg (21.8%)	80 %	16
Grain	Strzegom Czekoladowy jasny	0.25 kg (1.7%)	68 %	400
Grain	Strzegom Karmel 600	0.25 kg (1.7%)	68 %	601
Grain	Strzegom Czekoladowy 400	0.2 kg (1.4%)	68 %	400
Grain	Jęczmień palony	0.25 kg (1.7%)	55 %	985
Sugar	Milk Sugar (Lactose)	2 kg (13.7%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	60 g	60 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Us-05	Ale	Dry	20 g	---