

# Owsiany Milk Stout

- Gravity **15.2 BLG**
- ABV ---
- IBU **16**
- SRM **37.2**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.2 liter(s)**
- Total mash volume **27 liter(s)**

## Steps

- Temp **51 C**, Time **20 min**
- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **20.2 liter(s)** of strike water to **56.2C**
- Add grains
- Keep mash **20 min** at **51C**
- Keep mash **60 min** at **67C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15.6 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking melanoidynowy	0.5 kg (6.7%)	75 %	60
Grain	Strzegom Monachijski typ I	4 kg (53.7%)	79 %	16
Grain	Strzegom Czekoladowy ciemny	0.5 kg (6.7%)	68 %	1200
Grain	Strzegom Karmel 600	0.25 kg (3.4%)	68 %	600
Grain	Słód owsiany Fawcett	0.3 kg (4%)	61 %	5
Grain	Acid Malt	0.1 kg (1.3%)	58.7 %	6
Grain	Viking Pale Ale malt colorado	1 kg (13.4%)	80 %	5
Sugar	Milk Sugar (Lactose)	0.7 kg (9.4%)	76.1 %	0
Grain	Jęczmień palony	0.1 kg (1.3%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
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Boil	Marynka	15 g	30 min	10 %
Aroma (end of boil)	Golding	30 g	5 min	5 %
Aroma (end of boil)	Huell Melon	30 g	5 min	7.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
yeast bay	Ale	Dry	11 g	Mangrove Jack's