

## Milk stout wroc.

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- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **25**
- SRM **36.5**
- Style **Sweet Stout**

### Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

### Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.9 liter(s)**
- Total mash volume **11.8 liter(s)**

### Steps

- Temp **70 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **8.9 liter(s)** of strike water to **78.3C**
- Add grains
- Keep mash **60 min** at **70C**
- Keep mash **10 min** at **78C**
- Sparge using **9.3 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (72.5%)	80 %	5
Grain	Extra black	0.25 kg (7.2%)	65 %	1400
Grain	Kawowy Castlemalting	0.2 kg (5.8%)	74 %	500
Sugar	Milk Sugar (Lactose)	0.5 kg (14.5%)	76.1 %	0

### Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Amarillo	23 g	20 min	9.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
WLP519 Stranda Kveik Ale	Ale	Liquid	40 ml	White Labs