

## milk stout v.3

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- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **30**
- SRM **26.2**
- Style **Oatmeal Stout**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **23.7 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **10.3 liter(s)**
- Total mash volume **14.4 liter(s)**

### Steps

- Temp **67 C**, Time **70 min**
- Temp **67 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **10.3 liter(s)** of strike water to **76.4C**
- Add grains
- Keep mash **10 min** at **67C**
- Keep mash **70 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **17.5 liter(s)** of **76C** water or to achieve **23.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	3.6 kg (74.8%)	80 %	8
Grain	Carafa II	0.22 kg (4.6%)	70 %	812
Grain	Briess - Chocolate Malt	0.14 kg (2.9%)	60 %	900
Sugar	laktoza	0.7 kg (14.6%)	100 %	1
Grain	Jęczmień palony	0.1 kg (2.1%)	55 %	1300
Grain	zakwaszający	0.05 kg (1%)	80 %	15

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	magnum	24 g	70 min	11.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
m15	Ale	Dry	10 g	jack

### Extras

Type	Name	Amount	Use for	Time
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Other	laktoza	7000 g	Boil	60 min
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