

## #152 Milk Stout

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **28**
- SRM **37.6**
- Style **Sweet Stout**

### Batch size

- Expected quantity of finished beer **12.5 liter(s)**
- Trub loss **4 %**
- Size with trub loss **13 liter(s)**
- Boil time **67 min**
- Evaporation rate **10 %/h**
- Boil size **16.6 liter(s)**

### Mash information

- Mash efficiency **68 %**
- Liquor-to-grist ratio **5.6 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **22.3 liter(s)**

### Steps

- Temp **67 C**, Time **37 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **3 min**

### Mash step by step

- Heat up **18.9 liter(s)** of strike water to **71.2C**
- Add grains
- Keep mash **37 min** at **67C**
- Keep mash **20 min** at **72C**
- Keep mash **3 min** at **78C**
- Sparge using **1.1 liter(s)** of **76C** water or to achieve **16.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (53.6%)	80 %	5
Grain	Płatki owsiane	0.31 kg (8.3%)	75 %	3
Grain	Abbey Malt Weyermann	0.31 kg (8.3%)	75 %	45
Grain	Płatki żytnie	0.31 kg (8.3%)	75 %	3
Sugar	Milk Sugar (Lactose)	0.35 kg (9.4%)	76.1 %	0
Grain	Weyermann - Carafa II Special	0.31 kg (8.3%)	65 %	1150
Grain	Jęczmień palony	0.14 kg (3.8%)	55 %	985

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	19 g	55 min	9.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM12 W szkocką kratę	Ale	Liquid	375 ml	Fermentum Mobile