

## #79 Milk Stout

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **33**
- SRM **33.8**
- Style **Dry Stout**

### Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.8 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.1 liter(s) / kg**
- Mash size **20.2 liter(s)**
- Total mash volume **26.7 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **20.2 liter(s)** of strike water to **73.4C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **29.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	5 kg (66.7%)	85 %	7
Grain	Jęczmień palony	0.5 kg (6.7%)	55 %	985
Grain	Strzegom Czekoladowy jasny	0.5 kg (6.7%)	68 %	400
Grain	Płatki owsiane	0.3 kg (4%)	85 %	3
Grain	Caraaroma	0.2 kg (2.7%)	78 %	400
Sugar	Milk Sugar (Lactose)	1 kg (13.3%)	76.1 %	0

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	40 g	60 min	10 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	13.2 g	Danstar