

## Milk Stout (Pinta Project)

---

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **25**
- SRM **32.9**
- Style **Sweet Stout**

### Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.5 liter(s)**

### Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.7 liter(s)**
- Total mash volume **11.6 liter(s)**

### Steps

- Temp **64 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **8.7 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **10.7 liter(s)** of **76C** water or to achieve **16.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (60.6%)	80 %	5
Grain	Barley, Flaked	0.4 kg (12.1%)	70 %	4
Grain	Jęczmień palony	0.1 kg (3%)	55 %	1000
Grain	Fawcett - Pale Chocolate	0.2 kg (6.1%)	71 %	600
Grain	Fawcett - Pszeniczny Czekoladowy	0.2 kg (6.1%)	73 %	1001
Sugar	Milk Sugar (Lactose)	0.4 kg (12.1%)	76.1 %	0

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	30 g	60 min	5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Liquid	6.6 ml	Fermentum Mobile