

## #197 Milk Stout

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **23**
- SRM **39.1**
- Style **Sweet Stout**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **10 %**
- Size with trub loss **18 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **21.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.4 liter(s)**
- Total mash volume **19.8 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **15.4 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **10.4 liter(s)** of **76C** water or to achieve **21.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	3.7 kg (80.4%)	81 %	6
Grain	Strzegom Czekoladowy ciemny	0.3 kg (6.5%)	68 %	1200
Grain	Carafa III	0.3 kg (6.5%)	70 %	1034
Sugar	Milk Sugar (Lactose)	0.2 kg (4.3%)	76.1 %	0
Grain	Strzegom Karmel 300	0.1 kg (2.2%)	70 %	299

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	60 g	25 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Liquid	100 ml	Fermentum Mobile
WLP004 - Irish Ale Yeast	Ale	Liquid	70 ml	White Labs

### Notes

- FM przerwały prace  
*Oct 24, 2024, 3:26 PM*