

## #4 Milk Stout

---

- Gravity **15 BLG**
- ABV ---
- IBU **22**
- SRM **40**
- Style **Sweet Stout**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **10 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **31.6 liter(s)**

### Mash information

- Mash efficiency **88 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **14.6 liter(s)**
- Total mash volume **20.5 liter(s)**

### Steps

- Temp **68 C**, Time **80 min**
- Temp **73 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **14.6 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **80 min** at **68C**
- Keep mash **20 min** at **73C**
- Keep mash **10 min** at **78C**
- Sparge using **22.9 liter(s)** of **76C** water or to achieve **31.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4 kg (63%)	85 %	6
Grain	Strzegom Karmel 150	0.5 kg (7.9%)	80 %	150
Grain	Strzegom Czekoladowy 1200	0.5 kg (7.9%)	80 %	1202
Grain	Pszeniczny	0.5 kg (7.9%)	85 %	4
Grain	Jęczmień palony	0.35 kg (5.5%)	65 %	985
Adjunct	Płatki jęczmienne	0.5 kg (7.9%)	10 %	0

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Kent Goldings	30 g	60 min	7 %
Boil	Kent Goldings	20 g	10 min	7 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M07 British Ale	Ale	Dry	11.5 g	Mangrove Jack's

## Extras

Type	Name	Amount	Use for	Time
Other	Laktoza	500 g	Boil	10 min
Fining	Mech Irlandzki	5 g	Boil	10 min