

## #30 Milk Stout

- Gravity **19.1 BLG**
- ABV ---
- IBU **39**
- SRM **61.9**
- Style **Sweet 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 **30.4 liter(s)**

### Mash information

- Mash efficiency **84 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.7 liter(s)**
- Total mash volume **27.6 liter(s)**

### Steps

- Temp **69 C**, Time **180 min**

### Mash step by step

- Heat up **20.7 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **180 min** at **69C**
- Sparge using **16.6 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3 kg (38%)	79 %	6
Grain	Strzegom Monachijski typ I	2 kg (25.3%)	79 %	16
Grain	Kawowy Castlemalting 500	0.3 kg (3.8%)	68 %	500
Grain	Strzegom Karmel 600	0.3 kg (3.8%)	68 %	601
Grain	Strzegom Czekoladowy 1200	0.5 kg (6.3%)	68 %	1202
Grain	Płatki jęczmienne	0.5 kg (6.3%)	--- %	4
Grain	Castlemalting black of black jęczmień palony	0.3 kg (3.8%)	72 %	500
Sugar	Milk Sugar (Lactose)	1 kg (12.7%)	76.1 %	0

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	50 g	60 min	10 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	10 g	Safale