

Milk Stout

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **29**
- SRM **32.9**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **22.4 liter(s)**
- Total mash volume **29 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **22.4 liter(s)** of strike water to **73.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **12 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (34%)	80 %	5
Grain	Viking Pilsner malt	1 kg (13.6%)	82 %	4
Grain	Strzegom Monachijski typ II	1 kg (13.6%)	79 %	22
Grain	Viking Wheat Malt	0.5 kg (6.8%)	83 %	5
Grain	Płatki owsiane	0.6 kg (8.2%)	85 %	3
Grain	Strzegom Karmel 150	0.25 kg (3.4%)	75 %	150
Grain	Strzegom Czekoladowy jasny	0.25 kg (3.4%)	68 %	400
Grain	Strzegom Czekoladowy ciemny	0.25 kg (3.4%)	68 %	1200
Grain	Jęczmień palony	0.25 kg (3.4%)	55 %	985
Sugar	Milk Sugar (Lactose)	0.75 kg (10.2%)	76.1 %	0

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	30 g	60 min	11 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale