

Milk Stout

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **27**
- SRM **29.8**
- 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.2 liter(s)**
- Total mash volume **21.6 liter(s)**

Steps

- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **16.2 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **30 min** at **72C**
- Sparge using **17 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	3 kg (50.8%)	80 %	5
Grain	Strzegom Pszeniczny	1 kg (16.9%)	81 %	6
Grain	Strzegom Czekoladowy jasny	0.5 kg (8.5%)	68 %	400
Grain	Karmelowy Jasny 30EBC	0.5 kg (8.5%)	75 %	30
Grain	Jęczmień palony	0.4 kg (6.8%)	55 %	985
Sugar	Milk Sugar (Lactose)	0.5 kg (8.5%)	76.1 %	0

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 g	60 min	13.5 %
Boil	Magnum	15 g	10 min	13.5 %
Whirlpool	Magnum	20 g	---	13.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	200 ml	Safale

Extras

Type	Name	Amount	Use for	Time
Flavor	Laktoza	500 g	Secondary	1 day(s)