

Rye Milk Stout

- Gravity **18.7 BLG**
- ABV ---
- IBU **13**
- SRM **25.5**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **24.8 liter(s)**

Steps

- Temp **48 C**, Time **15 min**
- Temp **62 C**, Time **15 min**
- Temp **68 C**, Time **30 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **18.6 liter(s)** of strike water to **52.7C**
- Add grains
- Keep mash **15 min** at **48C**
- Keep mash **15 min** at **62C**
- Keep mash **30 min** at **68C**
- Keep mash **10 min** at **72C**
- Sparge using **11.8 liter(s)** of **76C** water or to achieve **24.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4 kg (59.7%)	79 %	6
Grain	Żytmi	1 kg (14.9%)	85 %	8
Grain	Strzegom Monachijski typ II	0.3 kg (4.5%)	79 %	22
Grain	Weyermann - Carafa II	0.2 kg (3%)	70 %	837
Grain	Briess - Extra Special Malt	0.2 kg (3%)	73 %	256
Grain	Płatki owsiane	0.5 kg (7.5%)	85 %	3
Sugar	Milk Sugar (Lactose)	0.5 kg (7.5%)	76.1 %	0

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sybilla	40 g	50 min	3.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
------	------	------	--------	------------

Safale S-04	Ale	Dry	11.5 g	Safale
-------------	-----	-----	--------	--------