

Milk Stout

- Gravity **16.5 BLG**
- ABV ---
- IBU **29**
- SRM **40**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.9 liter(s)**
- Total mash volume **29.2 liter(s)**

Steps

- Temp **50 C**, Time **15 min**
- Temp **68 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **21.9 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **15 min** at **50C**
- Keep mash **30 min** at **68C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **17.1 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Jęczmień palony	0.3 kg (3.8%)	55 %	1200
Grain	Strzegom Czekoladowy ciemny	0.5 kg (6.4%)	68 %	1200
Grain	Strzegom pszeniczny	0.5 kg (6.4%)	81 %	6
Grain	Strzegom Karmel 30	1 kg (12.8%)	75 %	30
Grain	Strzegom Pale Ale	5 kg (64.1%)	79 %	6
Adjunct	Milk Sugar (Lactose)	0.5 kg (6.4%)	100 %	0

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	60 min	10 %
Boil	Lublin (Lubelski)	25 g	60 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	5 g	Safale