

milk stout

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **23**
- SRM **32.6**
- 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 **28.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **22.7 liter(s)**

Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **17.7 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **28.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński optima	3 kg (54.1%)	82.6 %	4
Grain	Monachijski	1 kg (18%)	80 %	15
Grain	Carafa II	0.2 kg (3.6%)	70 %	812
Grain	Caraaroma	0.2 kg (3.6%)	75 %	400
Grain	Jęczmień palony	0.25 kg (4.5%)	55 %	985
Grain	Słód pszeniczny czekoladowy Weyermann	0.2 kg (3.6%)	65 %	1050
Grain	Słód Carahell (R)	0.2 kg (3.6%)	75 %	25
Sugar	Milk Sugar (Lactose)	0.5 kg (9%)	76.1 %	0

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	25 g	60 min	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	150 ml	---

Extras

Type	Name	Amount	Use for	Time
Fining	Whirlfloc T	1 g	Boil	10 min