

Mleczny Stout

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **31**
- SRM **35.8**
- 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 **3.05 liter(s) / kg**
- Mash size **13.9 liter(s)**
- Total mash volume **18.4 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **13.9 liter(s)** of strike water to **74.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **1 min** at **76C**
- Sparge using **14.9 liter(s)** of **76C** water or to achieve **24.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3.8 kg (75.2%)	80 %	4
Grain	Caraaroma	0.25 kg (5%)	78 %	400
Grain	Strzegom Czekoladowy ciemny	0.5 kg (9.9%)	68 %	1200
Sugar	Milk Sugar (Lactose)	0.5 kg (9.9%)	76.1 %	0

ostatnie 15 min gotowania brzezki

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle	35 g	60 min	8 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Other	Laktoza	500 g	Boil	15 min