

## Milk stout

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **39**
- SRM **35.8**
- Style **American 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 **3.5 liter(s) / kg**
- Mash size **24.5 liter(s)**
- Total mash volume **31.5 liter(s)**

### Steps

- Temp **64 C**, Time **30 min**
- Temp **68 C**, Time **30 min**
- Temp **72 C**, Time **10 min**

### Mash step by step

- Heat up **24.5 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **68C**
- Keep mash **10 min** at **72C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3 kg (40.5%)	79 %	6
Grain	Strzegom Monachijski typ I	3 kg (40.5%)	79 %	16
Grain	Strzegom Czekoladowy ciemny	0.3 kg (4.1%)	68 %	1200
Grain	Strzegom Karmel 300	0.4 kg (5.4%)	70 %	299
Grain	Strzegom Barwiący	0.3 kg (4.1%)	68 %	1300
Adjunct	Płatki owsiane	0.4 kg (5.4%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	40 g	60 min	12 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Other	Laktoza	800 g	Boil	15 min