

# mleczny staut

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- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **24**
- SRM **49**
- 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 **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.2 liter(s)**
- Total mash volume **21.6 liter(s)**

## Steps

- Temp **67 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **16.2 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **45 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (55.6%)	80 %	5
Grain	Strzegom Pilzneński	1 kg (18.5%)	80 %	4
Grain	Jęczmień palony	0.3 kg (5.6%)	55 %	985
Grain	Strzegom Czekoladowy ciemny	0.4 kg (7.4%)	68 %	1200
Grain	Strzegom Barwiący	0.3 kg (5.6%)	68 %	1300
Grain	Płatki owsiane	0.4 kg (7.4%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	40 g	60 min	5.5 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
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Flavor	Laktoza	500 g	Boil	0 min
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## Notes

- Próba jodowa po 45min na 67st  
Słody ciemne dodane na przerwę 72C  
*Apr 24, 2020, 12:31 PM*