

# Milk Stout

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **31**
- SRM **35.4**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23 liter(s)**
- Boil time **90 min**
- Evaporation rate **8 %/h**
- Boil size **26.7 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.9 liter(s)**
- Total mash volume **25.6 liter(s)**

## Steps

- Temp **67 C**, Time **90 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **19.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **90 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **12.5 liter(s)** of **76C** water or to achieve **26.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale	3 kg (46.4%)	80 %	5
Grain	Strzegom Czekoladowy jasny	0.2 kg (3.1%)	68 %	400
Grain	Carafa II	0.25 kg (3.9%)	70 %	812
Grain	Carafa III	0.25 kg (3.9%)	70 %	1034
Grain	Strzegom Karmel 150	0.3 kg (4.6%)	75 %	150
Grain	Strzegom Karmel 300	0.25 kg (3.9%)	70 %	299
Grain	Weyermann Specjal W	0.25 kg (3.9%)	68 %	300
Grain	Monachijski	0.5 kg (7.7%)	80 %	16
Grain	Płatki owsiane prażone	0.7 kg (10.8%)	85 %	3
Sugar	Laktoza	0.77 kg (11.9%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	25 g	60 min	13 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	12.78 g	Safale

### Extras

Type	Name	Amount	Use for	Time
Flavor	Wiórki kokosowe prażone	500 g	Secondary	7 day(s)
Flavor	Espresso	200 g	Secondary	7 day(s)
Spice	3 Laski wanilii	15 g	Secondary	7 day(s)

### Notes

- Płatki owsiane prażone 150 stopni/30min na dzień przed warzeniem.  
Wiórki prażone 150 stopni/15min i odsączone na ręcznikach papierowych  
Espresso ostudzić do temp pokojowej :)  
*Jun 19, 2017, 10:23 PM*