

# Stout owsiany z laktozą

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **25**
- SRM **33.5**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.3 liter(s)**
- Total mash volume **13.3 liter(s)**

## Steps

- Temp **68 C**, Time **55 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **10.3 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **55 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **5.9 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.8 kg (55.4%)	80 %	5
Grain	Caraaroma	0.2 kg (6.2%)	78 %	400
Grain	Strzegom Karmel 600	0.1 kg (3.1%)	68 %	601
Grain	Płatki owsiane	0.6 kg (18.5%)	60 %	3
Grain	Carafa II	0.25 kg (7.7%)	70 %	812
Sugar	Milk Sugar (Lactose)	0.3 kg (9.2%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Puławski	10 g	50 min	8.9 %
Whirlpool	Sabro	10 g	20 min	15 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	100 ml	Fermentis