

# Czekoladowy milk stout z orzechami

- Gravity **16.6 BLG**
- ABV ---
- IBU **15**
- SRM **46.8**
- Style **Oatmeal Stout**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **15 min**

## Mash step by step

- Heat up **19.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **14.7 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4 kg (54.8%)	79 %	6
Grain	Chocolate Malt (UK)	1 kg (13.7%)	73 %	887
Grain	Strzegom Karmel 600	0.5 kg (6.8%)	68 %	601
Sugar	Milk Sugar (Lactose)	0.8 kg (11%)	76.1 %	0
Grain	Oats, Flaked	1 kg (13.7%)	80 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	50 g	30 min	4.5 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Flavor	ziarna kakaowca	200 g	Secondary	4 day(s)

Flavor	laski wanilii	5 g	Secondary	2 day(s)
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