

# Stout czekoladowy

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- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **44**
- SRM **25.8**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **22.7 liter(s)**

## Steps

- Temp **67 C**, Time **90 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **17.7 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **90 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (59.4%)	80 %	5
Grain	Monachijski	1 kg (19.8%)	80 %	15
Grain	Strzegom Czekoladowy ciemny	0.2 kg (4%)	68 %	900
Grain	Jęczmień palony	0.35 kg (6.9%)	55 %	985
Grain	Płatki owsiane	0.5 kg (9.9%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	50 g	60 min	8.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	250 ml	---