

# Czekoladowy stout

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **19**
- SRM **45.5**
- Style **American Stout**

## Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **50.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **31.5 liter(s)**
- Total mash volume **42 liter(s)**

## Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **31.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **29.6 liter(s)** of **76C** water or to achieve **50.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	8 kg (66.7%)	80 %	5
Grain	Strzegom Czekoladowy ciemny	1 kg (8.3%)	68 %	1200
Grain	Jęczmień palony	0.5 kg (4.2%)	55 %	985
Sugar	laktoza	1.5 kg (12.5%)	--- %	---
Grain	Strzegom Czekoladowy jasny	1 kg (8.3%)	68 %	400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	50 g	60 min	4 %
Boil	Lublin (Lubelski)	50 g	45 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	23 g	Safale