

# Chocolate Stout

- Gravity **15 BLG**
- ABV ---
- IBU **44**
- SRM **47.6**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- 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 **70 %**
- Liquor-to-grist ratio **5 liter(s) / kg**
- Mash size **16.1 liter(s)**
- Total mash volume **19.3 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **2 min**

## Mash step by step

- Heat up **16.1 liter(s)** of strike water to **71.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **30 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **0.3 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	2 kg (62.1%)	80 %	5
Grain	Strzegom Czekoladowy jasny	0.37 kg (11.5%)	68 %	400
Grain	Fawcett - Crystal	0.5 kg (15.5%)	70 %	160
Grain	Jęczmień palony	0.1 kg (3.1%)	55 %	985
Grain	Płatki owsiane	0.25 kg (7.8%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	25 g	45 min	6 %
Boil	Cascade	25 g	15 min	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M07 British Ale	Ale	Dry	11.5 g	Mangrove Jack's

## Extras

Type	Name	Amount	Use for	Time
Flavor	Ekstrakt czekoladowy	60 g	Boil	5 min
Flavor	Ziarna kakaowe	100 g	Boil	60 min