

# Stout

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **49**
- SRM **25.7**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.8 liter(s)**
- Total mash volume **9 liter(s)**

## Steps

- Temp **70 C**, Time **72 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **6.8 liter(s)** of strike water to **78.3C**
- Add grains
- Keep mash **72 min** at **70C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	1.75 kg (77.8%)	80 %	7
Grain	Briess - Chocolate Malt	0.1 kg (4.4%)	60 %	690
Grain	Jęczmień palony	0.15 kg (6.7%)	55 %	985
Grain	Płatki owsiane	0.25 kg (11.1%)	60 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Target	20 g	60 min	10.5 %

## Yeasts

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