

# Dry Stout #1

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **46**
- SRM **27.6**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **23.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **68 C**, Time **70 min**
- Temp **68 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **13.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **10 min** at **68C**
- Keep mash **70 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **23.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	3.5 kg (77.8%)	80 %	7
Grain	Chocolate	0.2 kg (4.4%)	60 %	690
Dodane po 70 min zacierania				
Grain	Palone ziarno jęczmienia	0.3 kg (6.7%)	55 %	985
Dodane po 70 min zacierania				
Grain	Płatki jęczmienne	0.5 kg (11.1%)	75 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Target	35 g	60 min	10.5 %

## Yeasts

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

## Notes

- Uwarzone 12/10.  
Fermentacja burzliwa 12/10-19/10.

Fermentacja cicha 19/10-25/10.  
Butelkowanie 112g n 19l.  
*Nov 14, 2019, 5:39 PM*