

# Dry Stout

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **29**
- SRM **40.2**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **1 %**
- Size with trub loss **30.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **1 %/h**
- Boil size **30.9 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **30 liter(s)**

## Steps

- Temp **57 C**, Time **10 min**
- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **30 min**

## Mash step by step

- Heat up **24 liter(s)** of strike water to **61.6C**
- Add grains
- Keep mash **10 min** at **57C**
- Keep mash **60 min** at **66C**
- Keep mash **30 min** at **72C**
- Sparge using **12.9 liter(s)** of **76C** water or to achieve **30.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (66.7%)	80 %	5
Grain	płatki jęczmienne	1 kg (16.7%)	60 %	4
Grain	Jęczmień palony	0.4 kg (6.7%)	55 %	1150
Grain	Fawcett - Pszeniczny Czekoladowy	0.4 kg (6.7%)	73 %	1050
Grain	Weyermann - Dehusked Carafa III	0.2 kg (3.3%)	70 %	1400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	30 g	60 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Liquid	1 ml	Fermentum Mobile