

# Guinness-Style Dry Stout

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **24**
- SRM **23.5**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.2 liter(s)**

## Steps

- Temp **49 C**, Time **15 min**
- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **12.6 liter(s)** of strike water to **53.1C**
- Add grains
- Keep mash **15 min** at **49C**
- Keep mash **60 min** at **66C**
- Keep mash **1 min** at **76C**
- Sparge using **17.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Maris Otter Crisp	3.6 kg (72%)	83 %	6
Adjunct	płatki jęczmienne	1 kg (20%)	60 %	4
Adjunct	Jęczmień palony	0.4 kg (8%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	50 g	60 min	4.5 %
Boil	Whirflock	0.5 g	15 min	1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M42 New World Strong Ale	Ale	Dry	11.5 g	Mangrove Jack's