

# Irish Stout

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **31**
- SRM **32.4**
- 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 **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.8 liter(s)**
- Total mash volume **18.4 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **13.8 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **1 min** at **78C**
- Sparge using **17.2 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg (76.1%)	80 %	5
Grain	płatki jęczmienne	0.5 kg (10.9%)	85 %	3
Grain	Jęczmień palony	0.3 kg (6.5%)	55 %	985
Grain	Strzegom Czekoladowy ciemny	0.3 kg (6.5%)	68 %	1200

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 g	60 min	10.5 %
Boil	Izabella	30 g	20 min	6.9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Slant	600 ml	safale