

## #P01 Irish Stout

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **23**
- SRM **32.6**
- Style **Dry Stout**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **0 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Fawcett - Maris Otter Pale Ale	3 kg (60%)	80 %	6
Grain	Weyermann - Munich typ II	1 kg (20%)	79 %	22
Grain	Fawcett - Chocolate	0.25 kg (5%)	70 %	1200
Grain	Fawcett - Roasted Barley	0.25 kg (5%)	68.5 %	1500
Grain	Płatki jęczmienne	0.5 kg (10%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	35 g	60 min	5.2 %
Boil	East Kent Goldings	15 g	15 min	5.2 %

### Yeasts

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