

# IRA test#1

---

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **23**
- SRM **12.7**
- Style **Irish Red Ale**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **20.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.4 liter(s)**
- Total mash volume **16.6 liter(s)**

## Steps

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

## Mash step by step

- Heat up **12.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **1 min** at **76C**
- Sparge using **12.5 liter(s)** of **76C** water or to achieve **20.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	3.8 kg (91.6%)	81 %	6
Grain	Fawcett - Crystal	0.2 kg (4.8%)	70 %	160
Grain	Crystal II 200	0.1 kg (2.4%)	71 %	200
Grain	Jęczmień palony	0.05 kg (1.2%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	20 g	60 min	5 %
Boil	East Kent Goldings	25 g	20 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale

## Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	3 g	Boil	20 min