

# IRA

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **22**
- SRM **11.1**
- Style **Irish Red Ale**

## Batch size

- Expected quantity of finished beer **12.5 liter(s)**
- Trub loss **4 %**
- Size with trub loss **13 liter(s)**
- Boil time **70 min**
- Evaporation rate **20 %/h**
- Boil size **16.5 liter(s)**

## Mash information

- Mash efficiency **79 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **9.9 liter(s)**
- Total mash volume **12.8 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **9.9 liter(s)** of strike water to **71.8C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **76C**
- Sparge using **9.6 liter(s)** of **76C** water or to achieve **16.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Maris Otter	2.7 kg (90.5%)	80 %	6
Grain	Strzegom Karmel 150	0.125 kg (4.2%)	75 %	150
Grain	Weyermann - Carared	0.125 kg (4.2%)	75 %	45
Grain	Jęczmień palony	0.035 kg (1.2%)	1 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	20 g	60 min	6.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	5 g	Danstar

## Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	5 g	Boil	15 min