

# IRA

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **23**
- SRM **10.5**
- Style **Irish Red Ale**

## Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **19.3 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **11.7 liter(s)** of **76C** water or to achieve **22.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3 kg (69.8%)	81 %	4
Grain	Karmelowy Czerwony	0.4 kg (9.3%)	75 %	70
Grain	Monachijski	0.85 kg (19.8%)	80 %	15
Grain	Jęczmień palony	0.05 kg (1.2%)	55 %	1050

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sybilla	17 g	45 min	6 %
Boil	Sybilla	25 g	20 min	6 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	4 g	Boil	10 min