

## ira 4

- Gravity **13.8 BLG**
- ABV ---
- IBU **22**
- SRM **15.2**
- Style **Irish Red Ale**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **29.5 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

### Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **16.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **29.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (72.7%)	80 %	8
Grain	Strzegom Monachijski typ II	0.2 kg (3.6%)	79 %	43
Grain	Strzegom Wiedeński	0.5 kg (9.1%)	79 %	10
Grain	Karmelowy Czerwony	0.3 kg (5.5%)	75 %	59
Grain	Bestmalz Red X	0.3 kg (5.5%)	79 %	59
Grain	crystal 150	0.2 kg (3.6%)	--- %	296

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	10 %
Boil	Fuggles	15 g	10 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	100 ml	---

### Extras

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	7 g	Boil	10 min