

# Irish red ale 1 warka

---

- Gravity **12.3 BLG**
- ABV ---
- IBU **39**
- SRM **13.3**
- Style **Irish Red Ale**

## Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **10 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **24 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.1 liter(s)**
- Total mash volume **16.2 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **12.1 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **24 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	2.7 kg (66.7%)	85 %	7
Grain	Carared	0.5 kg (12.3%)	75 %	39
Grain	Monachijski	0.8 kg (19.8%)	79 %	16
Grain	Jęczmień palony	0.05 kg (1.2%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	30 g	60 min	7 %
Boil	Fuggles	30 g	30 min	4.5 %

## Yeasts

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