

# Irish Red Ale

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **27**
- SRM **10.3**
- Style **Irish Red Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

## Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **14.4 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	2.5 kg (52.1%)	82 %	4
Grain	Viking Pale Ale malt	1 kg (20.8%)	80 %	5
Grain	Strzegom Monachijski typ II	0.5 kg (10.4%)	79 %	22
Grain	Rahr - Red Wheat Malt	0.5 kg (10.4%)	85 %	89
Grain	Strzegom Karmel 150	0.3 kg (6.3%)	75 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	10 g	50 min	7 %
Boil	Challenger	10 g	40 min	7 %
Boil	lunga	20 g	15 min	11 %
Boil	Mech irlandzki	5 g	15 min	1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
------	------	------	--------	------------

FM13 Irlandzkie Ciemności	Ale	Liquid	30 ml	Fermentum Mobile
------------------------------	-----	--------	-------	------------------