

# red ale z guaraną

- Gravity **14.3 BLG**
- ABV ---
- IBU **23**
- SRM **17.2**
- Style **Irish Red Ale**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.2 liter(s)**
- Total mash volume **20.3 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **73 C**, Time **10 min**

## Mash step by step

- Heat up **15.2 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **73C**
- Sparge using **13.7 liter(s)** of **76C** water or to achieve **23.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4 kg (78.9%)	79 %	6
Grain	Weyermann - Carared	1 kg (19.7%)	75 %	45
Grain	Jęczmień palony	0.07 kg (1.4%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Ella (AUS)	10 g	10 min	14.6 %
Dry Hop	Ella (AUS)	25 g	5 day(s)	14.6 %
Boil	Topaz	10 g	10 min	15 %
Dry Hop	Topaz	25 g	5 day(s)	15 %
Boil	Ella (AUS)	15 g	5 min	14.6 %
Boil	Topaz	15 g	5 min	15 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M29	Ale	Dry	10 g	Mangrove Jack's

## Extras

Type	Name	Amount	Use for	Time
Herb	Guarana	100 g	Boil	5 min
Fining	mech irlandzki	5 g	Boil	5 min