

# Red Ale

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- Gravity **13.6 BLG**
- ABV ---
- IBU **29**
- SRM **15**
- Style **Irish Red Ale**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **24.4 liter(s)**

## Steps

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

## Mash step by step

- Heat up **18.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **78C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (65.6%)	80 %	5
Grain	Viking Wheat Malt	0.5 kg (8.2%)	83 %	5
Grain	Strzegom Czekoladowy jasny	0.3 kg (4.9%)	68 %	400
Grain	Strzegom Karmel 30	1.3 kg (21.3%)	75 %	40

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Nugget	20 g	60 min	13 %
Aroma (end of boil)	Citra	30 g	0 min	12 %

## Yeasts

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