

# 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     |