

Irish Red Ale

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **24**
- SRM **10.2**
- 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 **5 %/h**
- Boil size **23.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.9 liter(s)**
- Total mash volume **19.8 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **14.9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **13.2 liter(s)** of **76C** water or to achieve **23.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 3.5 kg (70.7%) | 80 % | 5 |
| Grain | Viking Munich Malt | 1 kg (20.2%) | 78 % | 18 |
| Grain | Karmelowy Czerwony | 0.4 kg (8.1%) | 75 % | 59 |
| Grain | Jęczmień palony | 0.05 kg (1%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil | lunga | 15 g | 60 min | 11 % |
| Boil | Challenger | 10 g | 20 min | 7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|-------|--------|------------------|
| FM12 W szkocką kratę | Ale | Slant | 110 ml | Fermentum Mobile |