

ira.T1

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **26**
- SRM **8.2**
- 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 **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **19.4 liter(s)**
- Total mash volume **24.3 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **19.4 liter(s)** of strike water to **69.5C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **10.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------|----------------|-------|-----|
| Grain | Briess - Pale Ale Malt | 4.3 kg (88.7%) | 80 % | 7 |
| Grain | Briess - 2 Row Carapils Malt | 0.5 kg (10.3%) | 75 % | 3 |
| Grain | Jęczmień palony | 0.05 kg (1%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil | Warrior | 15 g | 50 min | 15.5 % |
| Boil | Tradition | 5 g | 10 min | 5.5 % |
| Boil | Tradition | 5 g | 5 min | 5.5 % |

Yeasts

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