

IRA test#1

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **23**
- SRM **12.7**
- Style **Irish Red Ale**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **20.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.4 liter(s)**
- Total mash volume **16.6 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **12.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **1 min** at **76C**
- Sparge using **12.5 liter(s)** of **76C** water or to achieve **20.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Simpsons - Maris Otter | 3.8 kg (91.6%) | 81 % | 6 |
| Grain | Fawcett - Crystal | 0.2 kg (4.8%) | 70 % | 160 |
| Grain | Crystal II 200 | 0.1 kg (2.4%) | 71 % | 200 |
| Grain | Jęczmień palony | 0.05 kg (1.2%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil | Fuggles | 20 g | 60 min | 5 % |
| Boil | East Kent Goldings | 25 g | 20 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11 g | Safale |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Fining | mech irlandzki | 3 g | Boil | 20 min |