

IRA

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **23**
- SRM **10.5**
- Style **Irish Red Ale**

Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **19.3 liter(s)**

Steps

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

Mash step by step

- Heat up **15 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **11.7 liter(s)** of **76C** water or to achieve **22.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------|-----------------|-------|------|
| Grain | Pilzneński | 3 kg (69.8%) | 81 % | 4 |
| Grain | Karmelowy Czerwony | 0.4 kg (9.3%) | 75 % | 70 |
| Grain | Monachijski | 0.85 kg (19.8%) | 80 % | 15 |
| Grain | Jęczmień palony | 0.05 kg (1.2%) | 55 % | 1050 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Sybilla | 17 g | 45 min | 6 % |
| Boil | Sybilla | 25 g | 20 min | 6 % |

Yeasts

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

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Fining | Mech irlandzki | 4 g | Boil | 10 min |