

IRA

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **22**
- SRM **11.1**
- Style **Irish Red Ale**

Batch size

- Expected quantity of finished beer **12.5 liter(s)**
- Trub loss **4 %**
- Size with trub loss **13 liter(s)**
- Boil time **70 min**
- Evaporation rate **20 %/h**
- Boil size **16.5 liter(s)**

Mash information

- Mash efficiency **79 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **9.9 liter(s)**
- Total mash volume **12.8 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **9.9 liter(s)** of strike water to **71.8C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **76C**
- Sparge using **9.6 liter(s)** of **76C** water or to achieve **16.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|-----------------|-------|-----|
| Grain | Maris Otter | 2.7 kg (90.5%) | 80 % | 6 |
| Grain | Strzegom Karmel 150 | 0.125 kg (4.2%) | 75 % | 150 |
| Grain | Weyermann - Carared | 0.125 kg (4.2%) | 75 % | 45 |
| Grain | Jęczmień palony | 0.035 kg (1.2%) | 1 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Fuggles | 20 g | 60 min | 6.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|------|--------|------------|
| Danstar - Nottingham | Ale | Dry | 5 g | Danstar |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Fining | Mech irlandzki | 5 g | Boil | 15 min |